

# KAM reporting in the UK: a descriptive analysis 2013-2016

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## **Introduction**

The changes made to audit reporting have placed the UK at the forefront of the recent wave of audit reforms. The revised IAASB standards introduce changes to auditor reporting which are broadly consistent with the existing audit reporting requirements in the UK. The IAASB's revised auditor reporting standards include International Standards on Auditing (ISAs) 700: '*Forming an Opinion and Reporting on Financial Statements*' and 701: '*Communicating Key Audit Matters in the Independent Auditor's Report*'. "Key Audit Matters" are broadly equivalent to the "assessed risks of material misstatement" in the UK setting: a) a description of the most significant assessed risks of material misstatement, including assessed risks of material misstatement due to fraud; b) a summary of the auditor's response to those risks; and c) where relevant, key observations arising with respect to those risks. Furthermore, in the UK audit firms are also required to explain the application of the used materiality in the audit as well as elaborate on the scope of the audit (FRC, 2016).

The extended audit report should provide more confidence to stakeholders about the quality of the audit done by providing more contextual information about the audit approaches and the judgment exercised. The extended audit report intends to move away from boilerplate reporting (with a binary opinion, clean or non-clean) to a more informative audit report providing more transparency to different stakeholders about the way the audit is done. Therefore, the purpose of this study is to answer the question: '*Do extended audit reports have the potential to be informative?*' The answer to this question can only be affirmative if significant differences are observed in the way extended audit reporting is done between industries, firms within an industry and within firms over time.

In this report we analyze the extended audit reports of the FTSE 350 firms, the 350 largest firms with their primary listing on the London Stock Exchange. This sample of firms is chosen as the audit reports are expected to be of high quality due to the high visibility of those firms. We were able to collect data for 263 companies belonging to the FTSE 350, implying that 87 firms were dropped from the initial sample due to a variety of reasons. As we collected data over the first three years of extended audit reporting in the UK as well as for the year before the first extended audit report, we require that information for all four firms years is available. Mergers, acquisitions, IPOs or changes in the FTSE350 index itself are different reasons why the final sample is smaller than 350 firms. As the implementation of extended audit reporting in the UK is for all book years starting after October 1<sup>st</sup> 2012, the first year of KAM implementation is either 2013 or 2014.

For the year before the introduction of KAM (Key Audit Matters) reporting, we have 263 observations for which we collect information about the length of the audit report. For the first three years of KAM reporting we read 789 firm year observations (263 firms over three years) in detail in order to collect the data needed for the descriptive analysis. Figure 1 explains how the coding is done for each extended audit report. First, we collect information about the materiality basis used (total assets, revenues, profit from operations,...) and the materiality level (in percentage) adopted for each firm year observation. Second, we start by counting the number of words of the KAM section, followed by identifying the number of KAM (between 1 and N), the type of KAM (e.g. revenue recognition, goodwill, provision, taxation and regulation,...), the sequence of KAM (e.g. whether a particular KAM (e.g. revenue recognition is on the first, the second, third, fourth place) in the KAM section. Table 1 shows an example of the coding of the extended audit reporting.

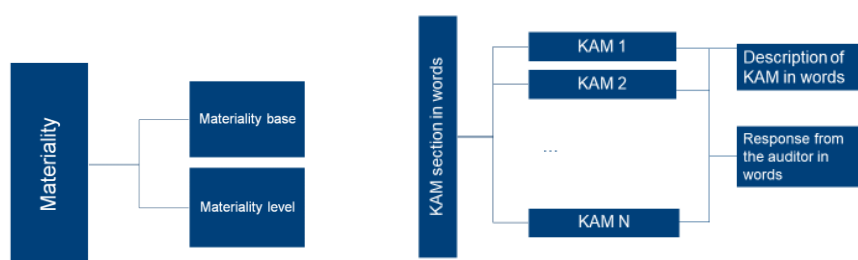


Figure 1: Coding of the KAM section and the materiality

	2012	2013	2014	2015
Base of Materiality	/	Profit from operations	Profit from operations	Profit from operations
Level of Materiality	/	5.00%	5.00%	5.00%
Length of the audit report (words)	810	2880	3841	4454
Length of the KAM section (words)	/	999	1573	1695
Description of the KAM (words)	/	205	641	629
Auditor response to the KAMS (words)	/	794	932	1066
Number of KAMs	/	6	7	6
Type and Sequence of the KAMs disclosed	/	1. Goodwill 2. Internal controls 3. Revenue recognition 4. Going concern 5. Provisions 6. Internal controls	1. Goodwill 2. Provisions 3. Presentation and disclosure 4. Going concern 5. Valuation 6. Financial instruments 7. Employee benefits	1. Goodwill 2. Provisions 3. Presentation and disclosure 4. Going concern 5. Financial instruments 6. Employee benefits

Table 1: example of the coding of the KAM and the materiality section.

This example shows that extended audit reporting resulted into a significant expansion of the audit report in number of words from 810 to 2880 in the first year of application. Note that in the second as well as the third year, the number of words of the total audit report further significantly increased to a level of 3841 and 4454. A similar pattern can be observed for the length of the KAM section, from 999 words in the first year to 1573 and 1695 in the second and third year. Note that over the three year period, the description of the KAM section more than doubled (205 compared to 629), while the increase is smaller for the reply from the auditor (from 794 to 1066). Finally, the number of KAMs varies between 6 and 7 in the three year period. However, note that the type of KAMs as well as the sequence changes. While valuation was a KAM in this example during the first and second year, it no longer occurs in the third year. The KAM ‘financial instruments’ only occurs in the second and third year. Finally, while ‘provisions’ was ranked fifth in the first year, it is discussed as the second KAM in the second and third year.

This information was collected and coded for each of the 789 firm-year observations and was then aggregated to investigate whether extended audit reporting has the potential to be informative to stakeholders. We conducted different types of analyses to answer the following questions

- *Analysis of the whole sample*: What is the average number of KAMs reported and which types of KAM most likely occur? Does the number of KAM and the type of KAM differ between industries?
- *Sample analysis over time*: Do KAM and materiality reporting change over time? Does the number and type of KAM change over time?
- *Sample analysis by industry*: Do KAM reporting and materiality reporting differ between firms within industries?

Note that the above questions determine the way this report is built up. First, we discuss the descriptive statistics for the whole sample, focus on differences between industries and on changes over time. Second, we provide information on the KAM and materiality reporting by industry, where we provide the following information in different tables (by industry):

- Table 1: the number of KAMs by year (mean, standard deviation, minimum, Q1, median, Q3, max);
- Table 2: the length of the KAM section by year (mean, standard deviation, minimum, Q1, median, Q3, max);
- Table 3: the top 5 of the KAMs disclosed by year;
- Table 4: the sequence of the top 5 disclosed;
- Table 5: the basis and the level of the materiality level applied (mean, standard deviation, minimum, Q1, median, Q3, max);
- Table 6: a comparison between that particular industry and the whole sample;
- Appendix 1: the frequency distribution of all KAMs disclosed in that industry;
- Appendix 2: As an example the longest KAM in words in that industry;
- Appendix 3: Examples of the top 5 of the KAMs disclosed (longest in words) in that industry;
- Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in that industry.

The choice of the examples of KAM reporting by industry is added to show the variation in the way KAM reporting is actually done. The choice of the KAM examples in each industry is not at hoc. First, we chose the longest KAM to illustrate how extensive the KAM reporting can be in a particular industry. Second, based on the relevance of a particular KAM, we add the longest KAM in words for the top 5 of KAMs disclosed in that industry. While the tables reveal differences in the number of words and the types of KAMs disclosed, the examples also illustrate differences in the tone of the wording (positive and negative) and also focus on the reply by the auditor. Finally, we given for the non-top 5 KAM in the industry, we give the same of the firm with the longest KAM. All the examples given relate to the third year of KAM application.

The distribution by industry is given in Table 2. Note that the discussion by industry is only done for industries with more than 4 firms as the question can be raised whether those results could be representative.

Industry	Number of firms	Percentage of the dataset
Retail trade	45	17.11%
Holding and other investment offices	38	14.45%
Manufacturing	32	12.17%
Depository institutions	26	9.89%
Mining	21	7.98%
Transportation and public utilities	19	7.22%
Business services	17	6.46%
Insurance carriers	13	4.94%
Construction	12	4.56%
Health care	9	3.42%
Engineering	8	3.04%
Real Estate	7	2.66%
Amusement and recreation services	4	1.52%
Wholesale trade	4	1.52%
Information technology	3	1.14%
Hotels	2	0.76%
Personal services	2	0.76%
Motion pictures	1	0.38%
Total	263	100%

**Table 2: Frequency table of the sample by industry**

In the following sections we first provide our analyses of the total sample followed by individual sections containing a detailed analysis per industry.

## Analysis of the total sample

### 1) Number and length of KAM

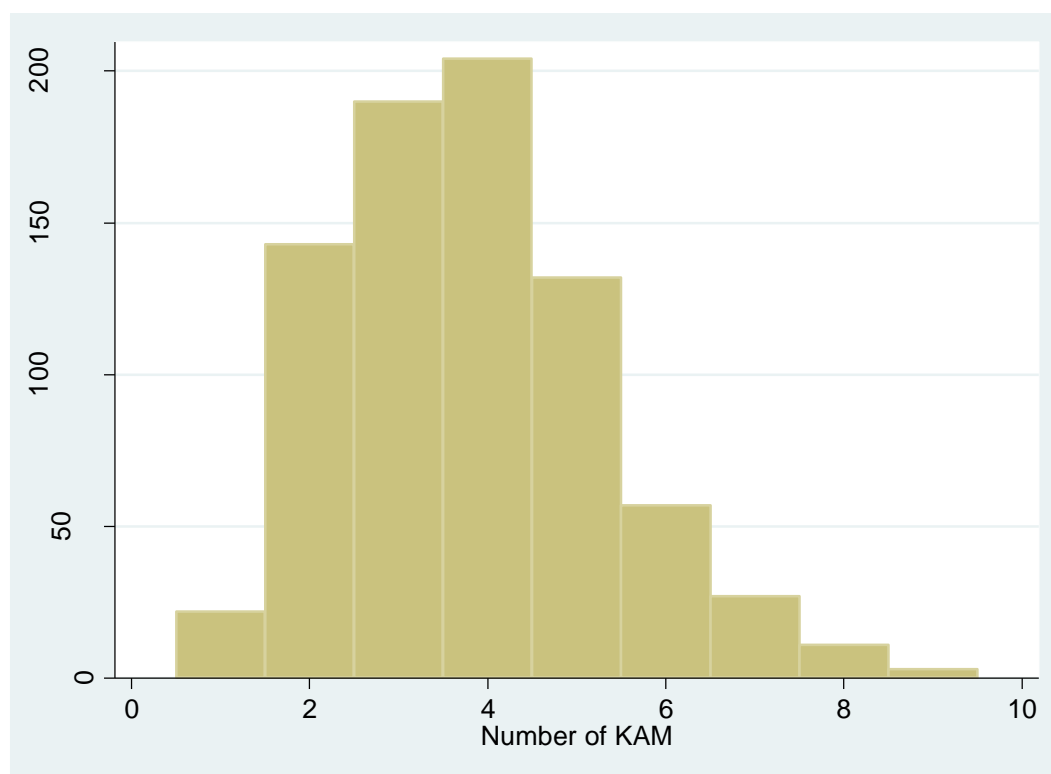
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	263	3.89	1.44	1	3	4	5	9
Number of KAM second year	263	3.84	1.53	1	3	4	5	8
Number of KAM third year	263	3.68	1.54	1	3	4	5	9
Number of KAM all years	789	3.80	1.50	1	3	4	5	9

**Table 1: The number of KAM in the total sample**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median does not change over time. It should be noted that the variance is very high (1.50), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive up to 9 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 4. It should be noted that the amount of reports with three or four KAMs is almost equal.



**Figure 1: Histogram of the number of KAM in the total sample over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median,

mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	263	767	469	44	469	706	978	4348
Length second year	263	1232	709	55	754	1085	1511	4962
Length third year	263	1372	743	232	889	1197	1816	5667
Length all years	789	1124	701	44	655	979	1412	5667

**Table 2: Descriptive statistics of the length of the KAM section in the total sample**

Table 2 shows that the number of words of the KAM section equals on average 1124 (median value of 979 words) using the three years as the sample period. We also observe a high variance between the minimum and the maximum value of the KAM length (between 44 words and 5667 words).

While the number of KAM stays constant over time, the length significantly increases over the three years. Table 2 shows that the average length of the KAM section significantly increases from the first to the second year and remains quite stable from the second to the third year. Given the number of KAM remains constant (see Table 1), this illustrates that the average length of a KAM discussed increases from 197 in the first year to an average of 373 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 9, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company discloses 4 KAMs (i.e. 3002 KAMS in total for the 789 firm year observations) with an average length of 1124 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (18.15 %), followed by valuation of non-current assets (12.56%), taxation and regulation (11.76%) and goodwill (10.36%). The category ‘Other’ includes KAM such as provisions, acquisitions, employee benefits,... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of the top four does not really change.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	18.57%	17.21%	18.70%	18.15%
Second most disclosed	Valuation of non-current assets	13.00%	12.16%	12.50%	12.56%
Third most disclosed	Taxation and regulation	11.14%	12.36%	11.78%	11.76%
Fourth most disclosed	Goodwill	10.07%	10.98%	10.02%	10.36%
Fifth most disclosed	Other	47.22%	47.29%	47.00%	47.17%

**Table 3: Type of KAM most often disclosed in the total sample**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.



KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM	Ninth KAM
Revenue recognition	32.66%	28.62%	19.08%	12.29%	4.04%	2.39%	0.73%	0.18%	0.00%
Valuation of non-current assets	43.24%	31.3%	13.00%	5.57%	2.91%	2.91%	1.06%	0.00%	0.00%
Taxation and regulation	7.93%	18.13%	31.16%	22.10%	12.18%	4.25%	3.12%	1.13%	0.00%
Goodwill	42.12%	24.76%	17.36%	9.00%	4.82%	0.64%	0.96%	0.32%	0.00%
Other	20.41%	24.93%	21.68%	17.09%	9.82%	4.10%	1.34%	0.56%	0.21%

**Table 4: Sequence of the five KAMs most often discussed in the total sample**

Although valuation of non-current assets is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Taxation and regulation is the third most common KAM and, if mentioned, it will appear most likely as the third KAM in the report.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (75.16%). The six other bases do not differ significantly in their occurrence.

Looking at the materiality level used, Q1 shows that a materiality level of 5% or higher is most commonly used with a maximum of 13.3%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	593	75.16	5.24	1.10	1	5	5	5	13.3
2	Net assets	66	8.37	1.23	0.56	0.5	1	1	1	3
3	Equity	42	5.32	1.32	0.63	0.5	1	1	1.9	3
4	Total assets	35	4.44	1.13	0.75	0.5	1	1	1	5
5	Revenue	18	2.28	1.45	1.43	0.4	0.5	0.95	2	5
6	Other	18	2.28	1.75	1.77	0.5	0.5	1	3	5.7
7	EBITDA	17	2.15	3.55	1.19	2	2.5	3.5	5	5

**Table 5: The applied materiality level in the total sample**

### **3) Summary of the main findings in the total sample**

The median number of KAM mentioned is 4 with an average length of 305 words per KAM. The content of the KAM section does not seem to change. Although valuation of non-current assets is not the most important KAM, if mentioned, the KAM appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average median percentage equals 5%.

	Total sample
Number of KAM (median)	4
Length per KAM	305
Most common type	1. Revenue recognition 2. Valuation of non-current assets 3. Taxation & regulation 4. Goodwill 5. Provisions

**Table 6: Summary table of the main findings in the total sample**

## Appendix 1: Frequency table of the KAMs disclosed in the whole sample

KAM	Frequency	Percentage
Revenue recognition	545	18.12
Valuation of non-current assets	377	12.56
Taxation and regulation	353	11.76
Goodwill	311	10.36
Provisions	282	9.39
Employee benefits	179	5.96
Acquisitions	149	4.96
Valuation of current assets	147	4.90
Impairment	142	4.73
Internal controls	125	4.16
Valuation	110	3.66
Presentation and disclosure	102	3.40
Financial instruments	57	1.90
Other	52	1.73
Business combination	40	1.33
Going concern	17	0.57
IT	14	0.47
Total	3002	100

**Table 7: Frequency table of the different types of KAM (three year period) in the total sample**

### **SIC CODE 10 Mining**

Out of the 350 constituents of the FTSE 350, 21 are active in the mining industry. Our dataset contains information about every company in the mining industry. The size of the mining industry is around the average industry size in the FTSE 350, which is 19.44.

#### **1) Number and length of KAM**

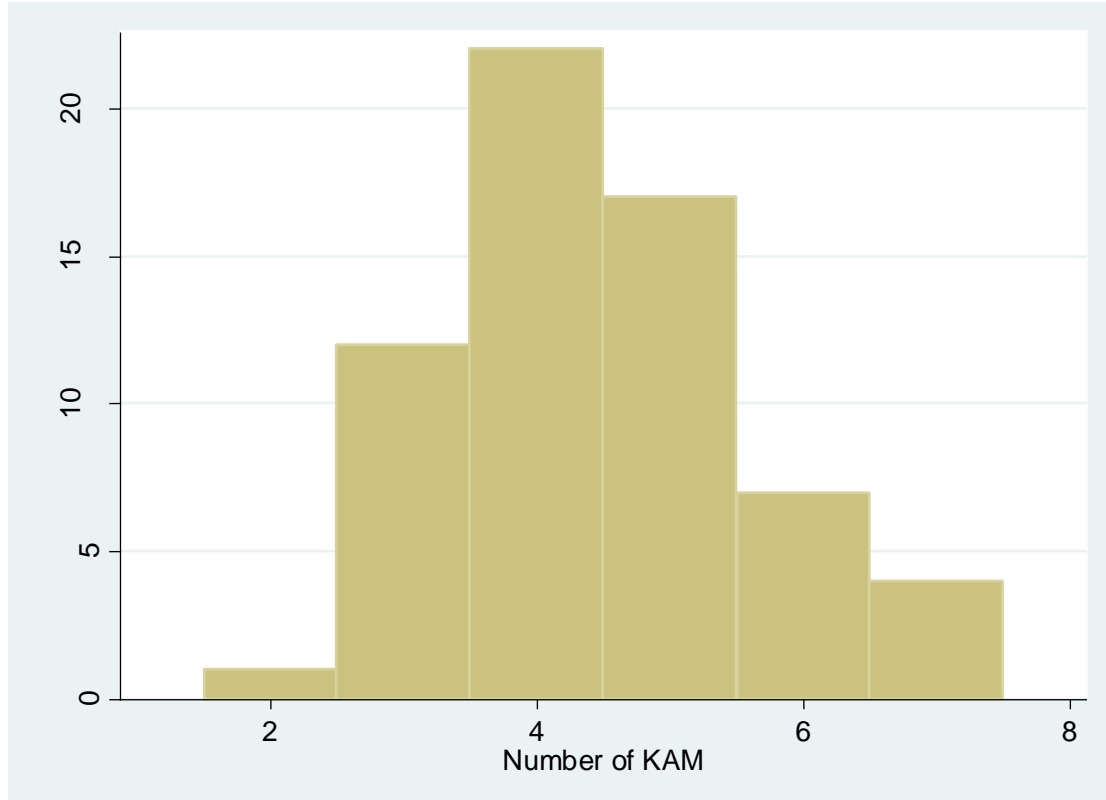
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	21	4.71	1.01	3	4	5	5	7
Number of KAM second year	21	4.52	1.25	3	4	4	5	7
Number of KAM third year	21	4.14	1.20	2	3	4	5	7
Number of KAM all years	63	4.46	1.16	2	4	4	5	7

**Table 1: The number of KAM in the mining industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median changes over time, where it decreases from five to four in the second year. It should be noted that the variance is relatively low (1.16), indicating that the absolute number of KAMs does not significantly differ between companies.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals the median of 4 KAMs. The histogram also shows that the variance in KAMs is rather limited.



**Figure 1: Histogram of the number of KAM in the mining industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	21	765	354.80	310	536	711	934	1849
Length second year	21	1316	544.66	431	858	1313	1461	2572
Length third year	21	1591	489.92	889	1197	1525	1940	2461
Length all years	63	1224	577.67	310	787	1142	1580	2572

**Table 2: Descriptive statistics of the length of the KAM section in the mining industry**

Table 2 shows that the number of words of the KAM section equals on average 1224 (median value of 1142 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 310 words and 2572 words).

While the number of KAM is decreasing over time, the length shows a strong increase over the three years. Table 2 shows that the average length of the KAM section increases significantly from the first to the second year and slightly increases from the second to the third year. Given that the number of KAM decreases (see Table 1), this illustrates that the average length of a KAM discussed in the mining industry increases from 162 in the first year to an average of 384 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 7, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the mining industry discloses 3 KAMs (i.e. 281 KAMS in total for the 63 firm year observations) with an average length of 1224 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is taxation and regulation (22.06%) followed by impairment (13.17%), valuation of non-current assets (12.81%) and revenue recognition (9.96%). The category 'Other' includes KAM such as provisions, acquisitions, employee benefits,... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of taxation and regulation (from 20.20% to 22.99%) increases over time, while the occurrence of impairment (from 13.13% to 13.79%), valuation of non-current assets (from 12.12% to 12.64%) and revenue recognition (from 11.11% to 10.34%) remains rather constant.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM remains constant, the content of the KAM discussion section changes over time with more emphasis on taxation and regulation.

	KAM	First year	Second year	Third year	All years
Most disclosed	Taxation and regulation	20.20%	23.16%	22.99%	22.06%
Second most disclosed	Impairment	13.13%	12.63%	13.79%	13.17%
Third most disclosed	Valuation of non-current assets	12.12%	13.68%	12.64%	12.81%
Fourth most disclosed	Revenue recognition	11.11%	8.42%	10.34%	9.96%
Fifth most disclosed	Other	43.44%	42.11%	40.24%	42.00%

**Table 3: Type of KAM most often disclosed in the mining industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM
Taxation and regulation	12.90%	20.97%	25.81%	22.58%	11.29%	1.61%	4.84%
Impairment	43.24%	40.54%	5.41%	8.11%	2.70%	0.00%	0.00%
Valuation of non-current assets	36.11%	33.33%	19.44%	2.78%	2.78%	5.56%	0.00%
Revenue recognition	14.29%	10.71%	25.00%	35.71%	3.57%	7.14%	3.57%
Other	18.64%	16.95%	25.42%	18.64%	15.25%	5.08%	0.00%

**Table 4: Sequence of the five KAMs most often discussed in the mining industry**

Although impairment is not the most important KAM discussed in the KAM section (see Table 3), if mentioned, it most often appears first in the KAM section. Similarly, although taxation and regulation is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second or third KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (76.19%), 12.70% uses total assets as a base to determine materiality, 4.76% uses another base and only 3.17% use revenue and EBITDA respectively.

Looking at the materiality level used, Q1 indicates that the applied level of materiality most often used in the mining industry equals 5 % or higher with a maximum of 8.5%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	48	76.19	5.21	0.90	3	5	5	5	8.5
2	Total assets	8	12.70	0.8875	0.21	0.5	1	1	1	1
3	Other	3	4.76	5.23	0.40	5	5	5	5.7	5.7
4	Revenue	2	3.17	0.75	0.35	0.5	0.5	0.75	1	1
5	EBITDA	2	3.17	2	0	2	2	2	2	2

**Table 5: The applied materiality level in the mining industry**

### 3) Summary of the main findings in the mining industry

In the mining industry the median number of KAM mentioned is 4 with an average length of 274 words per KAM. The content of the KAM section changes with more emphasis on taxation and regulation. Although impairment is relatively less important, if mentioned the KAM appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average median percentage equals 5%.

From the comparison with the total sample, we observe that mining is an industry with an equal amount of KAMs mentioned as the whole sample. Different from the whole sample, provisions are mentioned in the mining industry while goodwill does not appear in the top 5. Given the characteristics of the industry this is not that surprising.

	Mining	Total sample
Number of KAM (median)	4	4
Length per KAM	274	305
Most common type	1. Taxation & regulation 2. Impairment 3. Valuation of non-current assets 4. Revenue recognition 5. Provisions	1. Revenue recognition 2. Valuation of non-current assets 3. Taxation & regulation 4. Goodwill 5. Provisions

**Table 6: Summary table of the main findings in the mining industry**

## Appendix 1: Frequency table of the KAMs disclosed in the mining industry

KAM	Frequency	Percentage
Taxation and regulation	62	22.06
Impairment	37	13.17
Valuation of non-current assets	36	12.81
Revenue recognition	28	9.96
Provisions	22	7.83
Valuation	15	5.34
Goodwill	15	5.34
Acquisitions	12	4.27
Valuation of current assets	12	4.27
Going concern	8	2.85
Presentation and disclosure	8	2.85
Internal controls	8	2.85
Other	6	2.14
Employee benefits	4	1.42
Financial instruments	4	1.42
Business combination	3	1.07
IT	1	0.36
Total	281	100

**Table 7: Frequency table of the different types of KAM (three year period) in the mining industry**

**Appendix 2: Example of the longest KAM in the mining industry**

Hunting plc (2015 – Goodwill, 914 words)

**Goodwill and non-current asset impairment assessment**

Refer to pages 55 to 58 (Audit Committee report), page 87 (critical accounting estimates and judgements), pages 120 to 123 (principal accounting policies) and notes 14, 15 and 16 (property, plant and equipment, goodwill and other intangible assets).

The Group holds \$230.6m of goodwill on the balance sheet, which is net of a \$208.2m impairment recognized during the year. Additional intangible assets held by the Group, including customer relationships, unpatented technology and patents & trademarks, total \$180.4m, which is net of an \$11.2m impairment recognized during the year.

Goodwill and intangible asset valuation is a judgemental and complex area as it depends on the future financial performance of the cash generating unit ("CGU") and future market performance. In particular there is significant uncertainty in the oil and gas market as a result of the impact of the continued decline in oil prices. As such the key area of focus is the carrying value of assets, with our focus on judgemental areas being the forecast revenue and profit, terminal growth rates and the discount rates.

During the year the Group recognized a \$208.2m impairment against goodwill, of which \$35.2m was recognized during the interim period to 30 June 2015. The charge was taken predominantly against the Hunting Titan, Electronics and Stafford CGUs of \$107.6m, \$28.7m and \$17.8m respectively, with the remaining charge taken against goodwill across various US and UK based CGUs.

In addition, impairment charges of \$11.2m have been recognized against customer relationship intangible assets, where the recoverable amount of the asset is no longer supported by the estimated future revenue and gross margin applicable to the associated customer.

Other non-current assets held by the Group totaling \$460.8m, net of current year impairment of \$33.2m include land and buildings, plant, machinery and motor vehicles, rental tools, and oil and gas exploration and development (see area of focus on impairment of oil and gas properties below). Following a review of the carrying value of these non-current assets undertaken at 30 June 2015, impairment charges totaling \$26.8m were taken against the assets of the Drilling Tools

CGU, comprising of \$26.2m against rental tools, \$0.5m against land and buildings and \$0.1 m for other plant, machinery and motor vehicles.

These impairments reflect the respective CGUs' subdued financial performance in the year, as a result of increased competition, the impact of the continuing decline in oil prices on forecast revenue and the prolonged customer unwinding of inventory.

**How our audit addressed the area of focus**

We tested management's identification of the CGUs, considering business changes that would prompt a change to the classification of CGUs.

In order to test the impairment models, we challenged whether the future cash flow forecasts and the timing of recovery of these forecasts for the identified CGUs were appropriate.

More specifically, we challenged the key assumptions as follows:

Forecast revenue and profit assumptions and how management has incorporated the impact of the decline in oil prices, by comparing them to historical results, comparing the growth rates to independent specialist third party published reports and considering the impact already observed within the market;

Terminal growth rates, by comparing them to economic and industry forecasts; and



Discount rates, by assessing the cost of capital assumption for each CGU and comparable organizations.

We found the above assumptions to be consistent and in line with our expectations and that management has followed a clear process for drawing up the future cash flow forecasts, which was subject to oversight and challenge by the Directors and which was consistent with Board approved budgets.

In addition to evaluating management's assessments, we requested a "sum of the parts" valuation exercise be undertaken to determine the amount of the implied premium between the Group's net book value compared to the Group's market capitalization. We compared the implied premium with observable implied premiums for similar groups within the industry, noting that the Group's implied premium was within that range.

In respect of CGUs where impairments have been recognized, we sensitized each key driver of the cash flow forecasts, including the underlying assumptions listed above, by determining what we considered to be a reasonably possible change in the assumptions, based on current market data and historical and current business performance. Through this we determined an appropriate range for the fair value less cost of disposal for each CGU.

For all other CGUs, in particular those with lower relative headroom, we calculated the degree to which the key assumptions would need to change before an impairment was triggered. We assessed the likelihood of such a movement by comparison to sensitized forecasts and possible changes in discount rates and concluded that it was unlikely.

We concluded that the total goodwill impairment charge of \$208.2m recognized is supported by our testing of key assumptions. The impairment of \$11.2m recognized against customer relationship intangible assets was taken against specific relationships which were recognized on acquisition of the associated CGU. We considered the decline in revenue and gross margin derived by the customers to which the relationships relate and consider the impairment recognized by management to be reasonable. We note the remaining balance of \$118.5m is supported by the carrying value of the CGUs to which it relates.

The impairment recognized against property plant and equipment was taken in relation to specific assets which had been identified as surplus to requirements within the Drilling Tools CGU. We found the remaining noncurrent assets within the CGU are supported by the recoverable amount calculated through the impairment assessment management has performed.

**Appendix 3: Longest KAMs of the five most common KAMs in the mining industry****FIRST RANKED KAM IN THE MINING INDUSTRY: TAXATION AND REGULATION****The determination of the liabilities, contingent liabilities and disclosures arising from the significant uncertainties related to the Gulf of Mexico oil**

On 2 July 2015, the group announced it had reached agreements in principle with the United States federal government and five Gulf states to settle all federal and state claims arising from the incident.

The proposed Consent Decree to resolve all United States and Gulf states natural resource damage claims and Clean Water Act penalty claims is awaiting court approval. The United States is expected to file a motion with the court to enter the Consent Decree as a final settlement around the end of March, which the court will then consider. Although there is still risk, the agreements in principle have significantly reduced the uncertainty associated with this element of the liability determination for 2015. Following the agreements in principle, we concluded the remaining uncertainties were no longer fundamental to a user's understanding of the financial statements and therefore we have removed the Emphasis of Matter from our 2015 audit opinion.

There continues to be uncertainty regarding the outcome of Plaintiffs' Steering Committee ('PSC') settlements, the most substantial category being business economic loss claims. The 8 June 2015 deadline for claims resulted in a significant number of claims received, which have not yet been processed and quantified. Management concluded that a reliable estimation of the expected liability still cannot be made at 31 December 2015.

**Our response**

For the Gulf of Mexico oil spill the primary audit engagement team performed the following audit procedures.

- We walked through and tested the controls designed and operated by the group relating to the liability accounts for the Gulf of Mexico oil spill.
- We met with the group's legal team to understand developments across all of the Gulf of Mexico oil spill matters and their status. We discussed legal developments with the group's external lawyers and read determinations and judgments made by the courts.
- We reviewed the agreements in principle, verifying that specific matters were accurately reflected in the group's accounting and disclosures.
- With regard to PSC settlements, we engaged EY actuarial experts to consider the analysis of available claims data undertaken by management. We corroborated the data used in respect of all claim categories, with specific regard to business economic loss, this being the most complex to estimate. Our testing included understanding and verifying trends in the actuarial models, considering the approach in respect of all claim categories which included comparing with prior periods.
- We considered the accounting treatment of the liabilities, contingent liabilities and disclosures under IFRS criteria, to conclude whether these were appropriate in all the circumstances.

**What we concluded to the audit committee**

Based on our procedures we are satisfied that the amounts provided by management are appropriate. We are satisfied that management is unable to determine a reliable estimate for certain obligations as disclosed in Note 2 of the financial statements. Given the agreements in principle signed on 2 July 2015 we consider it appropriate that the Emphasis of Matter is no longer required in our audit opinion.

*SECOND MOST RANKED KAM IN THE MINING INDUSTRY: IMPAIRMENT***Impairment/reversal of impairment assessment**

Rio Tinto has goodwill of \$892 million, indefinite-lived intangible assets of \$1,655 million, property, plant and equipment of \$61,057 million, and exploration and evaluation assets of \$706 million as at 31 December 2015, contained within 47 cash generating units ("CGUs"). Impairment charges to each of these asset categories have been recognised in prior periods.

In 2015 a pre-tax impairment charge of \$2,791 million was recognised, which primarily related to goodwill, intangible assets and property, plant and equipment.

All CGUs containing goodwill and indefinite-lived intangible assets must be tested for impairment on an annual basis. Management must also determine the recoverable amount for other assets including property, plant and equipment and evaluation and exploration assets when impairment or impairment reversal indicators are identified.

For the CGUs which contain Rio Tinto's goodwill, indefinite-lived intangible assets, property, plant and equipment, and exploration and evaluation assets, the determination of recoverable amount, being the higher of value-in-use and fair value less costs to dispose, requires judgement on the part of management in both identifying and then valuing the relevant CGUs. Recoverable amounts are based on management's view of key variables and market conditions such as future commodity prices, the timing and approval of future capital and operating expenditure, and the most appropriate discount rate.

As well as considering indicators of impairment, management must determine whether any indicators of reversal of previous impairments are apparent for assets other than goodwill. Due to the decrease in commodity prices during the year, impairment reversals were only considered in a limited number of cases. No impairment reversals were recognized

In relation to specific projects or business units we noted the following:

**Roughrider** — in late 2015 the Group finalised an Order of Magnitude study for the Roughrider uranium project. Taking into account Rio Tinto's updated view of the development concept and geological model, a pre-tax impairment charge of \$116 million was recognised against goodwill, and a further \$113 million against evaluation and exploration assets.

**Energy Resources of Australia ("ERA")** — in June 2015 Rio Tinto announced that it supported ERA's decision not to proceed with the Final Feasibility Study of the Ranger 3 Deeps project. Rio Tinto also announced that it did not support any further study or future development of Ranger 3 Deeps due to the project's economic challenges. As a result, at 30 June 2015 Rio Tinto recognised a pre-tax impairment charge of \$260 million, predominantly related to property, plant and equipment.

**Oyu Tolgoi** — this project has progressed during 2015, including the agreement of project-specific financing for the underground development phase. However, forecast copper prices, to which the recoverable amount is sensitive, have declined. Management conducted an assessment of the recoverable amount of the Oyu Tolgoi CGU as described in Note 1(i) "Principal accounting policies" (Depreciation and impairment) utilising those forecast copper prices and a project-specific discount rate.

**Simandou** — completion of bankable feasibility studies for the mine, port infrastructure and rail infrastructure to support the Simandou project was delayed in 2015 due to the Ebola epidemic in West Africa. Draft separate feasibility studies for the mine, port and rail were issued in December 2015 with the final integrated feasibility study due in May 2016. Due to current market conditions and uncertainty over infrastructure ownership and funding Rio Tinto recognised a pre-tax impairment charge of \$2,039 million, predominantly related to exploration and evaluation assets and property, plant and equipment.

Refer to note 6 for management's conclusions and the Audit Committee's views set out on page 59.

### How our audit addressed the area of focus

For all material goodwill balances, indefinite-lived intangible assets, property, plant and equipment, and exploration and evaluation assets we undertook the following:

- We satisfied ourselves as to the appropriateness of management's identification of the Group's CGUs and the continued satisfactory operation of the Group's controls over the impairment assessment process.
- We evaluated management's assessment of impairment indicators, as well as indicators of impairment reversal, including the conclusions reached.
- With the support of our valuation specialists, we benchmarked key market related assumptions in management's valuation models used to determine recoverable amount, including future commodity prices, foreign exchange rates and discount rates, against external data.
- We verified the mathematical accuracy of management's valuation models and agreed relevant data, including assumptions on timing and future capital and operating expenditure, to the latest Life of Mine/production plans and budgets.\
- In addition to our overall response to impairment risk described above, we performed additional procedures on certain projects or business units as follows:
  - Roughrider — assessed the outcome of management's recently completed Order of Magnitude study, which included a revised geological model and an updated market outlook.;
  - ERA — checked management's decision not to continue to support ERA's Ranger 3 Deeps project through Rio Tinto board and committee meeting minutes and public announcements.;
  - Oyu Tolgoi — read the Underground Mine Development and Financing Plan and independently assessed management's project-specific discount rate, considering the terms of the project finance agreement signed in 2015. We also satisfied ourselves as to the appropriateness of the copper price assumptions used in management's impairment model.; and
  - Simandou — understood the key findings from the draft bankable feasibility studies and discussed these with management responsible for the project, considered management's assessment of external indicators of value for the project and considered the judgements taken by management in determining the impairment charge.
- We validated the appropriateness of the related disclosures in note 6 to the financial statements, including the sensitivities provided with respect to Oyu Tolgoi.

**Recoverability of the carrying value of the Group's mining assets**

Refer to the Audit Committee Report (page 33); Accounting policies (page 71); and Notes 16, 17 and 18 of the Consolidated Financial Statements.

At 31 December 2015 the carrying value of property, plant and equipment, evaluation and exploration assets and intangible assets was \$1,211.7m (2014: \$1,326.4m). The Group recognised impairment charges in respect of property, plant and equipment, evaluation and exploration assets and intangible assets during the year of \$207.1m (2014: nil).

We focused on this area because of the materiality of the balances involved and because the assessment of the recoverability of the carrying value of the Group's cash generating units ("CGUs") involves significant judgements about the future results of the business and the discount rates applied to future cash flow forecasts.

We continue to consider this to be a risk area in 2015, given the ongoing challenges faced by the Group during the year arising from declines and volatility in market prices for silver and gold.

**Our response to the risk**

Our approach focused on the following procedures:

- we obtained an understanding of management's process around impairment assessment, including all related controls;
- we audited management's assessment of whether indicators of impairment (as defined in IAS 36 "Impairment of Assets" and IFRS 6 "Exploration for and Evaluation of Mineral Resources") exist for its CGUs and evaluating this assessment, including a challenge of the validity and completeness of the indicators identified with reference to our knowledge of the business obtained elsewhere in our audit;
- where indicators existed, we obtained recoverable value models from management for the Group's CGUs and assessed the appropriateness of the methodology applied in preparing these recoverable value models;
- we tested the recoverable value models for accuracy, performed sensitivity analyses on significant inputs, and challenged the appropriateness of key assumptions (e.g. price assumptions, production and costing figures, etc.) as compared with third party/independent sources (e.g. analyst price forecasts) or other evidence;
- we involved valuations specialists to assist the audit team in challenging and assessing the appropriateness of the discount rates used in the calculation;
- we agreed key inputs to approved mine plans or budgets as appropriate, and compared these with historical actual figures, considering the accuracy of previous internal forecasts;
- we compared the calculated recoverable values to the associated carrying values, assessing whether any impairment charges or reversals of previously recognised impairment charges were necessary; and
- we considered the appropriateness, sufficiency, and clarity of any impairment-related disclosures provided in the Group Financial Statements, including the disclosure of key sensitivities.

We performed audit procedures at the Group level over this risk area covering 100% of the risk amount.

**What we concluded to the Audit Committee**

As a result of the procedures performed, we concluded that management's impairment indicator analysis and impairment assessment for the Group's CGUs had been carried out appropriately and in accordance with the requirements of IAS 36 "Impairment of Assets", IFRS 6 "Exploration and Evaluation of Mineral Resources" and IFRS 13 "Fair Value Measurement".

We challenged the accuracy and appropriateness of all significant assumptions, noting that all such assumptions fell within a range of acceptable outcomes. However, there are a number of particularly sensitive inputs in the analysis, to which only minor adverse changes would result in a (further) impairment charges being necessary to one or more of the Group's CGUs (as disclosed in note 16 to the consolidated financial statements).

We concur with management's conclusion to recognise an impairment charge of the Arcata, Crespo, Azuca, San Felipe and Volcan CGUs in the amount of \$207.1m. All required disclosures have been made in the Group financial statements.

*FOURTH MOST OFTEN RANKED KAM IN THE MINING INDUSTRY: REVENUE RECOGNITION***Laggan-Tormore related matters**

Refer to the Audit Committee Report (page 88) and Note 2 of the Consolidated financial statements (page 125)

**Potential prior year restatement**

The Board commissioned KPMG to carry out a review of the circumstances leading up to the 19 April 2015 market update on the Laggan-Tormore project with a view to identifying the issues for consideration relating to the incremental losses and their effect on the prior year.

The Group has stated in its financial statements that its losses on Laggan-Tormore recognised in the prior year were understated by between US\$27m and US\$57m after tax.

The Directors have concluded that no restatement of the 2014 reported results is required. In reaching this conclusion, the Directors considered the quantum of the prior year overstatement of profit in conjunction with relevant qualitative considerations. These are further explained in note 2 to the financial statements.

**Internal controls**

In light of the challenges faced by the Company in concluding on the appropriate recognition of losses on the Laggan-Tormore contract, it was identified that this may represent a significant deficiency in internal controls. The Audit Committee has concluded that such a deficiency existed in 2015 and has implemented mitigating actions in the 2015 year end reporting process.

**Costs-to-complete**

As the contract is nearing completion at year end, and in light of the control weaknesses above, there is a heightened risk of material misstatement in determining the remaining costs-to-complete of the project at year end.

**Liquidated damages**

The Group has made a significant judgement in determining whether potential liquidated damages arising from contract delays will be successfully pursued by the customer, and no provision has been recorded in the current year.

**Our response****Potential prior year adjustment**

We discussed and evaluated management's quantitative and qualitative analysis of amounts relating to prior periods and, whilst judgemental, we considered that assessment to be reasonable.

The estimated impact on profit before tax in the prior period was 4.5% to 9.5% before exceptional items. Further, we assessed the following qualitative factors:

- The total losses on Laggan-Tormore, which at 31 December 2015 exceed US\$600m
- Impact on prior year net assets of 2.8%
- The lack of impact on banking covenants, management remuneration, and historical trends and
- The level of disclosure made by the Company in the interim and full year financial statements

After considering carefully the nature and the quantum of the estimated amounts relating to prior period, and qualitative significance of the adjustment, we concurred with the directors that these amounts, whilst significant, were not material and the prior period financial statements did not require restating.

The estimated impact on prior periods has been charged to the income statement in the current period and the Group has separately identified losses on this contract as a separate item.

We concurred with this accounting treatment and with the detailed disclosures made in the financial statements about the impact of the misstatement on the prior periods' financial statements.

**Internal controls**

We concur with the Company that there existed a significant deficiency in internal controls intended to mitigate material misstatements on the Laggan-Tormore contract. We have considered the mitigating actions taken and have assigned further resources to ensure these actions appropriately reduce the risk of further misstatements on this contract.

**Costs-to-complete**

We have also assigned further resources to audit, in detail, the costs-to-complete on this contract at year end. This includes obtaining detailed schedules, challenging key elements to the costs, including

expected recoveries, reconciliation of vendor statements and holding discussions with senior management to corroborate the assumptions made.

#### Liquidated damages

We have discussed the likelihood of being levied with liquidated damages with senior management and the Audit Committee, and obtained supporting evidence for this judgement.

#### **What we concluded to the Audit Committee**

We reported to the Committee at the August 2015 interim review that we were satisfied on qualitative and quantitative grounds, and after taking into account the level of disclosures made in the interim and full year financial statements, that no restatement was necessary.

We updated this analysis and reached the same conclusion as at 31 December 2015.

We reported that we concur with the Group's disclosures in relation to the significant weakness in internal controls relating to this contract.

In respect of liquidated damages, we are satisfied that judgement not to book a provision has been based on appropriate analysis and is reasonable in the circumstances.

We have completed our planned procedures on the costs-to-complete and are satisfied that the basis upon which the contract losses have been calculated was rigorous and these losses are materially stated at 31 December 2015.



*FIFTH MOST OFTEN RANKED KAM IN THE MINING INDUSTRY: PROVISIONS***Close-down, restoration and environmental obligations**

Rio Tinto has provisions for close-down, restoration and environmental obligations of \$8,426 million as at 31 December 2015.

The calculation of these provisions requires management judgement in estimating the quantum and timing of future costs, particularly given the unique nature of each site, the long timescales involved and the potential associated obligations. These calculations also require management to determine an appropriate rate to discount these future costs back to their net present value.

The judgement required to estimate such costs is further compounded by the fact that there has been limited restoration and rehabilitation activity and historical precedent against which to benchmark estimates of future costs.

Management reviews the close-down, restoration and environment obligations on a semi-annual basis, using experts to provide support in its assessment where appropriate. This review incorporates the effects of any changes in local regulations and management's anticipated approach to restoration and rehabilitation.

Refer to note 26 and the Audit Committee's views set out on page 59.

**Our response**

We assessed management's process for the review of provisions, and performed detailed testing of the 31 December 2015 provision for five business units. For the remaining business units, including legacy operations, we assessed provision movements in the year relating to close-down, restoration and environmental obligations to check they were consistent with our understanding of the asset and associated remediation plans.

As part of our detailed testing of the cost estimates prepared by management for the five business units selected, we established the existence of legal and/or constructive obligations with respect to the restoration and rehabilitation for each business unit to assess the appropriateness of the intended method of restoration and rehabilitation and associated cost estimate.

We also considered the competence and objectivity of management's experts, whether internal or external to Rio Tinto, who produced the cost estimates.

We validated the accuracy of calculations and the appropriateness of the discount rate using our valuations specialists.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the mining industry

KAM	Mining
Valuation	RANDGOLD RESOURCES LTD
Goodwill	HUNTING PLC
Acquisitions	BHP BILLITON GROUP (GBR)
Valuation of current assets	ANGLO AMERICAN PLC
Going concern	KAZ MINERALS PLC
Presentation and disclosure	ANGLO AMERICAN PLC
Internal controls	RIO TINTO PLC
Other	GLENCORE PLC (2)
Employee benefits	RIO TINTO PLC
Financial instruments	ROYAL DUTCH SHELL PLC

### SIC CODE 15-16 Construction

Out of the 350 constituents of the FTSE 350, 15 are active in the construction industry. Our dataset contains information about 12 of these companies. The construction industry is amongst the smaller ones in the sample as the average industry size in the FTSE 350 is 19.44 firms.

#### 1) Number and length of KAM

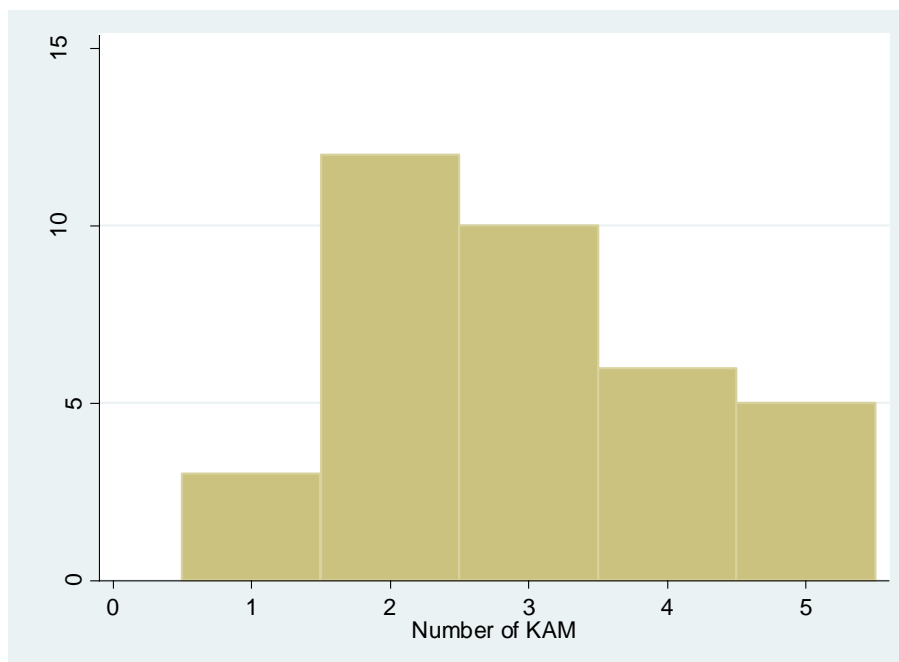
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	12	3	1.20	1	2	3	3.5	5
Number of KAM second year	12	2.92	1.31	1	2	2.5	4	5
Number of KAM third year	12	2.92	1.16	1	2	3	4	5
Number of KAM all years	36	2.94	1.19	1	2	3	4	5

**Table 1: The number of KAM in the construction industry**

Looking at the total sample period of 3 years we observe that the median number of KAM equals 3. The median of 3 KAMs is quite constant over time as for each of the years investigated the number of KAMs approximately equals 3. In spite of the constant median, it should be noted that the variance is relatively high (1.19), indicating that the absolute number of KAMs significantly varies between the different companies active within the construction industry. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While some firms only receive 1 KAM, the audit report of some firms discusses 5 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals two, which is lower than the median amount of KAM.



**Figure 1: Histogram of the number of KAM in the construction industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	12	908	319	604	702	819	1065	1525
Length second year	12	1200	535	598	853	1027	1405	2322
Length third year	12	1218	429	592	952	1038	1444	2039
Length all years	36	1109	448	592	819	985	1385	2322

**Table 2: Descriptive statistics of the length of the KAM section in the construction industry**

Table 2 shows that the number of words of the KAM section equals on average 1109 (median value of 985 words) using all three years as the sample period. We also observe high variance between the minimum and the maximum value of the KAM length (between 592 words and 2322 words), which is not surprising as the number of KAMs significantly varies by firm.

However, differently from the number of KAMs, the average length shows a significant increase over the three years from 908 words to 1218 words. Table 2 shows that the average length of the KAM section increases from the first to the second year (from 900 to 1200 words) and remains constant in the third year (around 1200 words). Given the number of KAM is quite stable over time (see Table 1), this illustrates that the average length of a KAM discussed in the construction industry increases from 300 in the first year to an average of 400 words in the third year.

Comparing the minimum and the maximum values of the length of KAM (592 compared to 2322) however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the high difference in the number of KAMs discussed (number of KAM 1 to 5, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the construction industry discloses 3 KAMs (i.e. 108 KAMS in total for the 36 firm year observations) with an average length of 1200 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (27.78%) followed by valuation of current assets (15.74%), valuation of non-current assets (12.96%), goodwill (11.11%) and other (32.41%). The category 'Other' includes KAM such as acquisitions, taxation and regulation, provisions, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of KAMs related to valuation of current assets has the highest increase (from 13.51% to 20% respectively), followed by goodwill (from 10.81% to 11.43%) and revenue recognition (from 27.02% to 28.57%), while the occurrence of valuation of non-current assets (from 13.51% to 8.57%) significantly drops over the three year period.

Linking the information about the type of KAM to the number of KAM (in Table 1), we can conclude that while the number of KAM remains quite stable, the content of the KAM discussion section changes over time with more emphasis on the valuation of current assets and revenue recognition and less emphasis on valuation of non-current assets. The occurrence of KAMS related to goodwill remains quite stable.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	27.02%	27.78%	28.57%	27.78%
Second most disclosed	Valuation of current assets	13.51%	13.89%	20.00%	15.74%
Third most disclosed	Valuation of non-current assets	13.51%	16.67%	8.57%	12.96%
Fourth most disclosed	Goodwill	10.81%	11.11%	11.43%	11.11%
Fifth most disclosed	Other	35.15%	30.55%	31.43%	32.41%

**Table 3: Type of KAM most often disclosed in the construction industry**

The sequence of the KAMs (first, second, third, ...) can also provide some additional information about the relative importance of the KAM. If the most disclosed KAM is 'revenue recognition' and it is always ranked first in the KAM section, the information content will be different from a situation where it is always ranked fifth or sixth. The rank provides a broader picture of the relative importance of a certain KAM. Table 4 discusses the sequence of the five most common KAMs in the construction industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM
Revenue recognition	50.00%	6.67%	26.67%	13.33%	3.33%
Valuation of current assets	64.70%	35.29%	0.00%	0.00%	0.00%
Valuation of non-current assets	0.00%	78.57%	14.29%	7.14%	0.00%
Goodwill	8.33%	58.33%	16.67%	8.33%	8.33%
Other	28.57%	20.00%	28.57%	20.00%	2.86%

**Table 4: Sequence of the five KAMs most often discussed in the construction industry**

Although valuation of current assets is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section and never occurs as the third, fourth or fifth KAM. Finally, important to note is that revenue recognition also appears as fourth or fifth KAM in the KAM section, which probably indicates that they are added to be complete (probably also explained by the ISA standards).

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (91.67%), only 5.56% uses total assets and 2.78% uses revenue. That revenue and total assets as the materiality base are the exceptions is also shown by the absolute number which only equals 2 and 1 firm year observations. Q1 shows that a materiality level of 5% is most commonly used in the construction industry. The maximum percentage applied equals 8.5%.

Base	obs	Frequency of the base	Materiality level used (%)						
			Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
Profit before tax	33	91.67	5.41	1.28	1	5	5	5.9	8.5
Total assets	2	5.56	2.95	2.9	0.9	0.9	2.95	5	5
Revenue	1	2.78	1	/	1	/	/	/	1

**Table 5: The applied materiality level in the construction industry**

### 3) Summary of the main findings in the construction industry

In the construction industry the median number of KAM mentioned is 3 with an average length of 400 words per KAM (approximately 1200 words in total per report). While the number of KAM remains quite stable over the three years studied, the content of the KAM section changes with more emphasis on the valuation of current assets and revenue recognition and less emphasis on valuation of non-current assets. The relative importance of goodwill remains quite stable over time. Although valuation of current assets occurs less than revenue recognition, if mentioned it more likely appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that construction is an industry with less KAMs than for the whole sample but more extensively discussed. Finally, given the characteristics of the industry it is not surprising that valuation of current assets occurs more as a KAM, compared to the total sample of FTSE 350 firms investigated.

	Construction	Total sample
Number of KAM (median)	3	4
Length per KAM	400	305
Most common type of KAM	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of current assets (first rank)</li> <li>3. Valuation of non-current assets</li> <li>4. Goodwill</li> <li>5. Valuation</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation and regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in the construction industry**

## Appendix 1: Frequency table of the KAMs disclosed in the construction industry

KAM	Frequency	Percentage
Revenue recognition	28	25.93
Valuation of current assets	17	15.74
Valuation of non-current assets	14	12.96
Goodwill	12	11.11
Valuation	12	11.11
Employee benefits	8	7.41
Provisions	5	4.63
Taxation and regulation	4	3.70
Acquisitions	3	2.78
Internal controls	2	1.85
Presentation and disclosure	1	0.93
Business combinations	1	0.93
Impairment	1	0.93
Total	108	100

**Table 7: Frequency table of the different types of KAM (three year period) in the construction industry**

Appendix 2: Example of the longest KAM in the construction industry

Bellway plc (2016 – Revenue recognition, 855 words)

**Area of focus**

Profit recognition on current sites and the carrying amount of land held for development and work in progress (gross profit £574.8 million; land held for development and work in progress £2,532.1 million).

Refer to pages 50 to 51 (Audit Committee Report), pages 82 and 85 (Accounting Policies) and note 13 on page 93 (financial disclosures).

The risk- Profit recognition on current sites and the net realizable value of land held for development and work in progress are both reliant on the Group's forecast of future selling prices and build costs, both of which are uncertain. Forecast selling prices are inherently uncertain due to challenges in assessing market conditions. Build costs, and in particular sub-contractor costs, can vary with market conditions and may also be incorrectly forecast due to unforeseen events during construction.

Gross profit is recognized on house sales based on the latest whole site gross margin which is an output of the site valuations prepared by the Group's divisional technical teams. These valuations use actual and forecast selling prices and build costs and are sensitive to inaccuracies in recording actual costs incurred, forecast costs to complete and expected selling prices.

Land held for development and work in progress are held at the lower of cost and net realizable value (i.e. the forecast selling price less the remaining costs to build and sell). An assessment of the net realizable value of land held for development and work in progress is carried out at each balance sheet date and is dependent on the Group's estimates of future selling prices and build costs, together with the likelihood of receiving planning permission for land held for development. Planning permission is dependent on local and national policies and without planning permission sites cannot be developed.

A change in the Group's estimate of sales price and build cost could have a material impact on the carrying value of land held for development and work in progress and the level of profit recognition in the Group's financial statements.

**Our response - our audit procedures included:**

- Inspecting a sample of land additions to evaluate the terms of the transaction and checking to the amounts recorded in the financial statements, including re-performing the calculation of fair value for a sample of land acquired on deferred payment terms.
- Assessing a sample of land not currently being developed to confirm that the Group still intended to develop this site by reference to confirmed planning permission
- Testing the Group's controls over the authorization and recording of costs, including agreeing a sample of costs incurred to date from job cost reports to invoice and/or payment, including verifying that they relate to the site against which they have been allocated.
- Testing the performance of the Group's controls over the production of site valuations, including the reconciliation of actual costs incurred and included in work in progress to date to job costs reports.
- Attendance at a selection of site valuation meetings, where incurred costs and revenues were reviewed against budgets and estimates of future cost and selling prices were discussed, challenged and updated, to check that senior operational, commercial and financial management were effectively challenging the forecast margins utilized to recognize profit.



- We used a variety of quantitative and qualitative factors to select those sites with a higher risk of material misstatement and conducted detailed site reviews for these sites to understand the associated risks and ascertain whether these risks had been factored into the site valuations. The site reviews included the following procedures, among others, where relevant, i) making inquiries of senior operational, commercial and financial management about their assessment of risks for these sites; ii) reviewing site plans to gain an understanding of progress made and problems arising on the site; iii) comparing actual and budgeted unit sales and average selling prices to date to identify potential build or sale issues; and iv) for a sample of costs, agreeing total estimated costs to purchase orders/sub-contractor agreements (including variations from initial estimates).
- For all active sites and sites completed in the year we performed a comparison of budgeted and latest forecast margin at July 2016 in order to assess the Group's ability to forecast accurately.
- On a site by site basis, we compared the gross margin recognized in the financial statements with the latest site valuations to determine whether the margin recognized was appropriate.
- We developed an expectation, based on our attendance at site valuation meetings, our detailed site reviews and other procedures, including inquiries and reviews of divisional board reports, of sites to be included in the Group's net realizable value provision. We obtained the Group's net realisable value provision and compared land held for development and work in progress sites included to our expectations and, with reference to site valuations, determined whether amounts included had been calculated appropriately for these sites.
- For a sample of developments completed in the year, we compared the cost to complete accrual created to the latest site valuation and obtained confirmation for significant differences.
- Challenging the adequacy of the Group's disclosures in relation to areas of judgement and estimation in relation to these balances by performing sensitivity analysis on key assumptions.

### Appendix 3: Longest KAMs of the five most common KAMs in the construction industry

#### *FIRST RANKED KAM IN THE CONSTRUCTION INDUSTRY: REVENUE RECOGNITION*

The risk: Profit recognition on current sites and the net realisable value of land held for development and work in progress are both reliant on the Group's forecast of future selling prices and build costs, both of which are uncertain. Forecast selling prices are inherently uncertain due to challenges in assessing market conditions. Build costs, and in particular sub-contractor costs, can vary with market conditions and may also be incorrectly forecast due to unforeseen events during construction.

Gross profit is recognised on house sales based on the latest whole site gross margin which is an output of the site valuations prepared by the Group's divisional technical teams. These valuations use actual and forecast selling prices and build costs and are sensitive to inaccuracies in recording actual costs incurred, forecast costs to complete and expected selling prices.

Land held for development and work in progress are held at the lower of cost and net realisable value (i.e. the forecast selling price less the remaining costs to build and sell). An assessment of the net realisable value of land held for development and work in progress is carried out at each balance sheet date and is dependent on the Group's estimates of future selling prices and build costs, together with the likelihood of receiving planning permission for land held for development. Planning permission is dependent on local and national policies and without planning permission sites cannot be developed.

A change in the Group's estimate of sales price and build cost could have a material impact on the carrying value of land held for development and work in progress and the level of profit recognition in the Group's financial statements.

#### **Our response**

our audit procedures included:

- Inspecting a sample of land additions to evaluate the terms of the transaction and checking to the amounts recorded in the financial statements, including re-performing the calculation of fair value for a sample of land acquired on deferred payment terms.
- Assessing a sample of land not currently being developed to confirm that the Group still intended to develop this site by reference to confirmed planning permission
- Testing the Group's controls over the authorisation and recording of costs, including agreeing a sample of costs incurred to date from job cost reports to invoice and/or payment, including verifying that they relate to the site against which they have been allocated.
- Testing the performance of the Group's controls over the production of site valuations, including the reconciliation of actual costs incurred and included in work in progress to date to job costs reports.
- Attendance at a selection of site valuation meetings, where incurred costs and revenues were reviewed against budgets and estimates of future cost and selling prices were discussed, challenged and updated, to check that senior operational, commercial and financial management were effectively challenging the forecast margins utilised to recognise profit.
- We used a variety of quantitative and qualitative factors to select those sites with a higher risk of material misstatement and conducted detailed site reviews for these sites to understand the associated risks and ascertain whether these risks had been factored into the site valuations. The site reviews included the following procedures, among others, where relevant, i) making inquiries of senior operational, commercial and financial management about their assessment of risks for these sites; ii) reviewing site plans to gain and understanding of progress made and problems arising on the site; iii) comparing actual and budgeted unit sales and average selling prices to date to identify potential build or sale issues; and iv) for a sample of costs, agreeing total estimated costs to purchase orders/sub-contractor agreements (including variations from initial estimates).
- For all active sites and sites completed in the year we performed a comparison of budgeted and latest forecast margin at July 2016 in order to assess the Group's ability to forecast accurately.

- On a site by site basis, we compared the gross margin recognised in the financial statements with the latest site valuations to determine whether the margin recognised was appropriate.
- We developed an expectation, based on our attendance at site valuation meetings, our detailed site reviews and other procedures, including inquiries and reviews of divisional board reports, of sites to be included in the Group's net realisable value provision. We obtained the Group's net realisable value provision and compared land held for development and work in progress sites included to our expectations and, with reference to site valuations, determined whether amounts included had been calculated appropriately for these sites.
- For a sample of developments completed in the year, we compared the cost to complete accrual created to the latest site valuation and obtained confirmation for significant differences.
- Challenging the adequacy of the Group's disclosures in relation to areas of judgement and estimation in relation to these balances by performing sensitivity analysis on key assumptions.

*SECOND MOST RANKED KAM IN THE CONSTRUCTION INDUSTRY: VALUATION OF CURRENT ASSETS***Carrying value of inventories and profit recognition (inventories: £3,256.1 million (2015 - £2,654.1 million), gross profit: £701.7 million (2015 - £716.8 million))**

Refer to page 78 (Audit Committee report), pages 115 to 117 (accounting policy) and page 127 (financial disclosures).

The Group recognises profit on each sale by reference to the overall site margin, which is the forecast profit percentage for a site that may comprise multiple phases and can last a number of years. The recognition of profit is therefore dependent on the Group's estimate of future selling prices and build costs, which form the basis of their forecasts, including an appropriate allowance for risk.

Future selling prices are dependent on market conditions, which can be difficult to predict and be influenced by broader political and economic factors.

Future build costs are subject to a number of variables including the accuracy of designs, market conditions in respect of materials and sub-contractor cost and construction issues.

Inventory represents the costs of land, materials, design and related production and site costs to date. It is held at the lower of cost and net realisable value, the latter also being based on the forecast for the site. As such errors in these forecasts can impact the assessment over the carrying value of inventories and gross profit.

There is also a risk that costs are inappropriately capitalised within inventories or that the allocation of costs that relate to the whole site, such as land and infrastructure, is inappropriate across development phases, resulting in a material misstatement of inventory or gross profit.

**Our audit procedures in respect of this area included:**

Testing the Group's controls by checking approvals over reviewing and updating selling price and cost forecasts, authorising and recording of costs.

We inspected the site forecasts on a sample basis and challenged the assumptions for future costs and sales.

We corroborated a sample of forecast costs back to supplier agreements or tenders. We also consider, based on the risks highlighted by build cost review meetings and wider industry cost indices, the appropriateness of allowances made for cost increases and for risks inherent in longer term developments.

We corroborated forecast sales prices against recent prices achieved in the relevant local market, and considered factors that may influence the achievable price on future sales.

We compared the margin recognised in the year on any units sold to the forecast site margin over the life of the development.

We inspected the minutes and attended a selection of management's build cost review meetings. At these meetings management review actual costs and revenues against detailed site budgets. Estimates of future costs and selling prices in the forecasts are challenged by management including reference to tendered works packages, actual costs incurred and forward sales reservation prices. Our inspection of the minutes and attendance at a selection of meetings included assessing whether the appropriate individuals attended the meetings and that the valuations and costs to complete forecasts for all developments were discussed, challenged and the valuations updated as appropriate.

We agreed a sample of additions in the inventory balance to invoice and/or payment, including checking that they were allocated to the appropriate site and development phase and met the definition of inventory costs.

*THIRD MOST OFTEN RANKED KAM IN THE CONSTRUCTION INDUSTRY: VALUATION OF NON-CURRENT ASSETS***Valuation of land and properties**

Refer to page 62 (Risk Management and Audit Committee Report), page 105 (accounting policy) and page 125 (notes).

Inventory in the Property and Residential divisions is stated at the lower of cost and net realisable value (i.e. the forecast selling price less the remaining costs to build and sell). An assessment of the net realisable value of inventory is carried out at each balance sheet date and is dependent upon management's estimate of forecast selling prices and build costs (by reference to current prices), which may require significant judgement.

The Group holds inventory of £251.9m (2015: £284m) within the Residential division, which comprises the Group's land held for residential development £137.3m (2015: £117m) and residential work in progress £114.6m (2015: £167m) where building work has commenced.

We focused our work on those sites with a value of £47.1m (2015: £46.8m) where there is no immediate intention of development as there is a heightened risk that they are valued above their recoverable amount. Therefore a change in the Group's forecast estimate of sales price and build cost could have a material impact on the carrying value of inventories in the Group's financial statements.

**Our response**

We reviewed the property-specific development appraisals supporting the carrying values and challenged the key assumptions underlying these appraisals as follows:

- We reviewed management's expected build cost per square foot by comparing to the build costs for similar units on other sites and where there were differences, validating explanations against third-party confirmations including quantity surveyor cost estimates, correspondence with suppliers or comparable properties on other sites;
- We challenged management on their intention to develop these sites; and
- We challenged management's forecast sales prices to supporting third-party evidence from management's external sales agents and by comparing the forecast sales price of a sample of sales prices achieved and the list prices of comparable assets as published by estate agents.

We did not encounter any issues through our audit procedures that indicated the land or properties tested were impaired.

*FOURTH MOST OFTEN RANKED KAM IN THE CONSTRUCTION INDUSTRY: GOODWILL***Carrying value of goodwill (E1,544.0 million)**

Refer to page 54 (Report of the Audit Committee), page 85 (note

1. Significant accounting policies - Goodwill and other intangible assets) and pages 98 to 99 (note 11. Intangible assets).

The risk - The Group's balance sheet includes goodwill, principally arising from historical acquisitions in the UK. The risk is that the goodwill allocated to cash generating units ('CGU') is not recoverable and should be impaired. Due to the inherent uncertainty involved in forecasting and discounting future cash flows, which are the basis of the assessment of recoverability, this is one of the key judgemental areas for our audit.

The Group annually carries out an impairment assessment of goodwill using a value-in-use model which is based on the net present value of the forecast earnings of the cash-generating unit ('value-in-use'). This is calculated using certain assumptions around discount rates, growth rates and cash flow forecasts.

Given the relative size of the goodwill in the Group balance sheet, particularly in the UK Services CGU, relatively small changes in these assumptions could give rise to material changes in the assessment of the carrying value of goodwill.

**Our response** - Our procedures included critically assessing the key assumptions applied by the Group in determining the recoverable amounts of each CGU. In particular, we:

- considered the consistency and appropriateness of the allocation of businesses and related goodwill balances into CGUs;
- considered the underlying assumptions in determining the cash flows and growth assumptions applied with reference to historical forecasting accuracy and wider macro environment conditions; challenged the assumptions used in the calculation of the discount rates used by the Group, including comparisons with external data sources and consideration of the potential risk of management bias; performed our own sensitivity analysis, including a reasonably possible reduction in assumed growth rates and cash flows to identify areas to focus our procedures on and we also assessed whether the Group's disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions appropriately reflected the risks inherent in the valuation of goodwill.

*FIFTH MOST OFTEN RANKED KAM IN THE CONSTRUCTION INDUSTRY: VALUATION*

**Construction contracts may not be appropriately valued**

The valuation of amounts recoverable on construction contracts is dependent on judgments around stage of completion and remaining costs to complete, as well as the associated provisions. In some of the Group's projects there are assumptions about recovery of values from clients, designers, subcontractors or insurers, and value is recorded within work in progress which is not yet agreed. There is risk surrounding the recoverability of the work in progress and the completeness of provisions in place.

Refer to note 1: Accounting Policies on page 91 of the Annual Report and the Audit Committee Report on page 59 of the Annual Report.

**Our response**

We assessed the evidence provided by management regarding recovery of the un-agreed value on projects. This included external expert and legal advice and correspondence from clients, subcontractors and insurers. We considered the adequacy of provisions held.

- We tested the operating effectiveness of key controls around stage-of-completion, costs to complete and forecast margin calculations.
- We identified and assessed a sample of key judgments inherent in estimation of significant projects, particularly around stage of completion, costs to complete and provisions on loss-making contracts through our testing of contract review meetings, reading correspondence with the customer and subcontractors, and obtaining audit evidence on customer/supplier disputes and insurance claims.
- We compared the final outcome on projects completed in the year to previous estimates made on those projects to assess the reliability of management's estimates.
- We tested whether valid contractual agreements or other documentation was in place to support a sample of balances.
- We identified, and obtained and corroborated explanations for, unusual fluctuations in margins on significant projects.

We found no material misstatements from our testing

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the construction industry

KAM	Construction
Employee benefits	REDROW PLC
Provisions	HOMESERVE PLC
Taxation and regulation	HOMESERVE PLC
Acquisitions	BOVIS HOMES GROUP PLC



### **SIC CODE 20-38 Manufacturing**

Out of the 350 constituents of the FTSE 350, 53 are active in the manufacturing industry. Our dataset contains information about 32 of these companies. The Manufacturing industry is amongst the largest ones in the sample as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

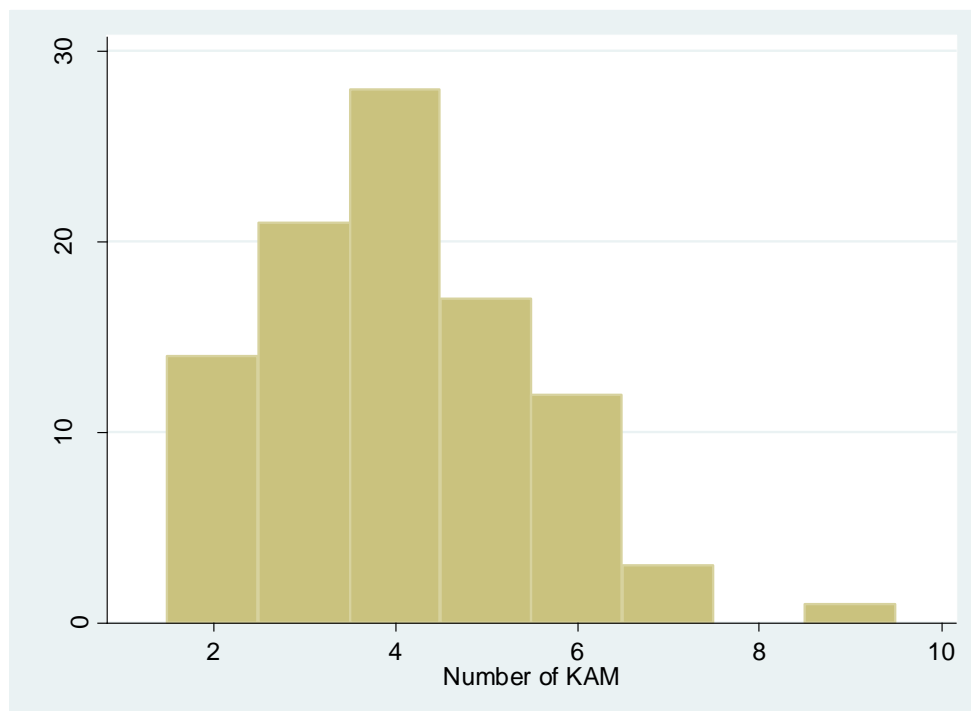
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	32	4.06	1.58	2	3	4	5	9
Number of KAM second year	32	4.13	1.36	2	3	4	5	7
Number of KAM third year	32	4	1.37	2	3	4	5	7
Number of KAM all years	96	4.06	1.43	2	3	4	5	9

**Table 1: The number of KAM in the manufacturing industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median of KAMs is constant over the three years. It should be noted that the variance is relatively high (1.43), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAM, some firms receive 9 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals the median: 4. We also see that the histogram has a heavier right tail, due to the outlier of 9 KAMs



**Figure 1: Histogram of the number of KAM in the manufacturing industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	32	879	723	357	541	713	911	4348
Length second year	32	966	1266	396	653	933	1452	4962
Length third year	32	1409	988	479	718	1119	1898	5667
Length all years	96	1185	919	357	651	897	1382	5667

**Table 2: Descriptive statistics of the length of the KAM section in the manufacturing industry**

Table 2 shows that the number of words of the KAM section equals on average 1185 (median value of 897 words) using the three years as the sample period. We also observe a very high variance between the minimum and the maximum value of the KAM length (between 357 words and 5667 words).

While the number of KAM remains constant, the length shows a strong increase over the three years. Table 2 shows that the average length of the KAM section increases every year. Given the number of KAM remains constant over time (see Table 1), this illustrates that the average length of a single KAM discussed in the manufacturing industry increases from 216 in the first year to an average of 352 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 9, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the manufacturing industry discloses 4 KAMs (i.e. 390 KAMS in total for the 96 firm year observations) with an average length of 1185 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is goodwill (15.90%) followed by taxation and regulation (15.38%), provisions (15.13%) and revenue recognition (12.05%). The category ‘Other’ includes KAM such as acquisitions, presentation and disclosure, impairment, ... It should be noted that the average frequencies of the top four KAMs lie very close together, indicating that there is not one specific type of KAM dominating the audit reports. A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a Taxation and regulation KAM slightly increases (from 13.85% to 14.84%), while the occurrence of goodwill (from 16.15% to 14.84%), provisions (from 15.38% to 14.84%) and revenue recognition (from 13.08% to 10.94%) decreases.

	KAM	First year	Second year	Third year	All years
Most disclosed	Goodwill	16.15%	16.67%	14.84%	15.90%
Second most disclosed	Taxation and regulation	13.85%	17.42%	14.84%	15.38%
Third most disclosed	Provisions	15.38%	15.15%	14.84%	15.13%
Fourth most disclosed	Revenue recognition	13.08%	12.12%	10.94%	12.05%
Fifth most disclosed	Other	41.54%	38.64%	44.54%	41.54%

**Table 3: Type of KAM most often disclosed in the manufacturing industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM	Ninth KAM
Goodwill	59.68%	20.97%	9.68%	8.06%	1.61%	0.00%	0.00%	0.00%	0.00%
Taxation and regulation	5.00%	8.33%	35.00%	21.67%	20.00%	8.33%	0.00%	1.67%	0.00%
Provisions	15.25%	35.59%	16.59%	23.73%	6.78%	1.69%	0.00%	0.00%	0.00%
Revenue recognition	40.43%	27.66%	19.15%	6.38%	2.13%	2.13%	2.13%	0.00%	0.00%
Other	17.28%	17.16%	22.22%	16.05%	9.26%	5.55%	1.85%	0.00%	0.62%

**Table 4: Sequence of the five KAMs most often discussed in the manufacturing industry**

Goodwill is the most important KAM in the industry and, if discussed, it most often appears first in the KAM section. Similarly, taxation and regulation is the second most often discussed KAM (see Table 3) and, if present, it is most likely discussed as the third KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (91.67%). 7.25% uses EBTIDA as the base of materiality.

Looking at the materiality level used, Q1 shows that the materiality level most often used in the manufacturing industry equals 5% or higher with a maximum of 10%.

Base	obs	Frequency of the base	Materiality level used (%) Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1 Profit before tax	88	91.67	5.54	1.20	3.5	5	5	6.6	10
2 EBITDA	8	7.25	3.24	1.10	2.5	2.5	2.7	4	5

**Table 5: The applied materiality level in the manufacturing industry**

### 3) Summary of the main findings in the manufacturing industry

In the manufacturing industry the median number of KAM mentioned is 4 with an average length of 292 words per KAM. Different from many other industries there does not seem to dominate one particular KAM. While the number of KAM remains stable over the three years studied, the content of the KAM section changes with more emphasis on taxation and regulation. Goodwill is the most important KAM and often appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that manufacturing is an industry with an equal amount of KAMs mentioned as the whole sample and quite similar KAMS discussed. Only employee benefits occur in the top 5 for the manufacturing sample and not for the whole sample.

	Manufacturing	Total sample
Number of KAM (median)	4	4
Length per KAM	292	305
Most common type	1. Goodwill	1. Revenue recognition
	2. Taxation & regulation	2. Valuation of non-current assets
	3. Provisions	3. Taxation and regulation
	4. Revenue recognition	4. Goodwill
	5. Employee benefits	5. Provisions

**Table 6: Summary table of the main findings in the manufacturing industry**

## Appendix 1: Frequency table of the KAMs disclosed in the manufacturing industry

KAM	Frequency	Percentage
Goodwill	62	15.90
Taxation and regulation	60	15.38
Provision	59	15.13
Revenue recognition	47	12.05
Employee benefits	46	11.79
Valuation of current assets	26	6.67
Valuation of non-current assets	22	5.64
Presentation and disclosure	19	4.87
Acquisitions	19	4.87
Impairment	7	1.79
Internal controls	7	1.79
Valuation	6	1.54
Business combinations	5	1.82
Going concern	4	1.02
Other	1	0.26
Total	390	100

**Table 7: Frequency table of the different types of KAM (three year period) in the manufacturing industry**

## Appendix 2: Example of the longest KAM in the manufacturing industry

Rolls-Royce holdings plc (2015 – Valuation of non-current assets, 895 words) **Recoverability of intangible assets (certification costs and participation fees, development expenditure and contractual aftermarket rights) in the Civil Aerospace business**

*Refer to page 115 (Key sources of estimation uncertainty— Forecasts and discount rates), pages 119 and 120 (Significant accounting policies — Certification costs and participation fees, Research and development, Contractual aftermarket rights and Impairment of non-current assets), pages 132 and 133 (Note 9 to the financial statements — Intangible assets) and pages 93 and 94 (Audit Committee report— Financial reporting)*

**The risk** —The recovery of these assets depends on a combination of achieving sufficiently profitable business in the future as well as the ability of customers to pay amounts due under contracts often over a long period of time. Assets relating to a particular engine programme are more prone to the risk of impairment in the early years of a programme as the engine's market position is established. In addition, the pricing of business with launch customers makes assets relating to these engines more prone to the risk of impairment.

In 2015, the Group reduced its estimate of the future maintenance costs on certain Trent 1000 launch engines which in previous periods had been at a level requiring the impairment of the related CARs assets and the recording of a related provision. This resulted in the reversal of previously recognized impairments and the related provision with a profit of £65m being recognized (*2014: impairment charge of £19m*) and the capitalization of £22m that would otherwise have been impaired.

The significance of the risk has decreased somewhat during the year due to better information on the performance of the Trent 1000 engine following the first shop visits and confirmation of the Emirates order for Trent 900 engines (the Trent 900 programme assets had been identified as being at higher risk of impairment in the prior year).

**Our response** — We tested the controls designed and applied by the Group to provide assurance that the assumptions used in preparing the impairment calculations are regularly updated, that changes are monitored, scrutinized and approved by appropriate personnel and that the final assumptions used in impairment testing have been appropriately approved. We challenged the appropriateness of the key assumptions in the impairment test (including market size, market share, pricing, engine and aftermarket unit costs, individual programme assumptions, price and cost escalation, discount rate and exchange rates). Our challenge was based on our assessment of the historical accuracy of the Group's estimates in previous periods, our understanding of the commercial prospects of key engine programmes, identification and analysis of changes in assumptions from prior periods and an assessment of the consistency of assumptions across programmes and customers and comparison of assumptions with publicly available data where this was available. We tested the mathematical accuracy of the impairment calculations. We considered whether the disclosures in note 9 to the financial statements describe the inherent degree of subjectivity in the estimates and the potential impact on future periods of revisions to these estimates.

In particular, with regard to the reversal of impairments on certain Trent 1000 launch engine CARs and a related provision, we challenged the key assumptions underlying the forecast future cash flows to be derived from the engines including: the period and mode of operation of the engines, the time and materials maintenance revenue (which the Group has guaranteed will not exceed a specified maximum amount) and the cost of required maintenance activity. Our assessment was that the amount of profit to be recognized depended critically on the Group engineering department's judgement as to the impact on estimated future maintenance costs of the wear and tear on the engines based on their first few years of operation (evidenced by the first strip down and detailed off-wing investigations of engines in the second half of 2015). Given the specialist knowledge necessary to make these judgements appropriately, we assessed the capabilities and objectivity of the employees making the judgement and the members of management reviewing and approving the judgements. Finally to

supplement this and to ensure that the matter had received appropriate attention from the Board, we sought and received written representations from the Directors that, based on their enquiries, they consider that the engineering judgement is appropriate and that, based on that consideration, the recognition of the profit of £65m is appropriate.

**Our findings** — Our testing did not identify weaknesses in the design and operation of controls that would have required us to expand the nature or scope of our planned detailed test work. We found that the assumptions and resulting estimates were balanced (*2014 audit finding: balanced*) and that the disclosures were proportionate (*2014 audit finding: proportionate*). We found no errors in calculations (*2014 audit finding: none*).

With regard to the reversal of impairments on certain Trent 1000 launch engine CARs and a related provision, we found no evidence that this was motivated by the positive impact it has had on profit in the current year. We found that the change in estimate from the prior periods was based on improved information becoming available in 2015 as the engine programme moved out of its earliest stages which has reduced estimation uncertainty, that there was no indication of bias and that the estimate of forecast future cash flows to be derived from the engines was balanced and supported the accounting treatments adopted by the Group. We found the disclosure of the impact to be ample.

**Appendix 3: Longest KAMs of the five most common KAMs in the manufacturing industry****FIRST RANKED KAM IN THE MANUFACTURING INDUSTRY: GOODWILL****The assessment of the carrying value of goodwill and acquired intangible assets (£411m, PY comparative £338m)**

Refer to the Audit Committee Report (page 55); Accounting policies (page 129); and section 3.2.2 of the Consolidated Financial Statements (page 98)

As a consequence of the Group's growth strategy a significant value of goodwill and intangible assets has arisen from acquisitions. There is a risk that cash generating units ('CGUs') may not achieve the anticipated business performance to support the carrying value of these assets leading to an impairment charge that has not been recognised by management. Significant judgement is required in assessing the future cash flows of the CGU, together with the rate at which they are discounted.

During 2015, and as a result of changes to the operational activities within the Group to integrate the activities of acquired business, transfer technology and increase the incidence of cross-selling by its businesses, management have redefined the groups of CGUs within the Critical engineering division to which goodwill is allocated. In particular, some previously separate CGUs have been combined to reflect those groups which now generate cash inflows that are largely independent of the others. These changes led management to restructure its internal reporting accordingly. A risk exists that the CGUs used in the impairment testing are not appropriate.

**Our response to the risk**

We walked through management's controls in respect of their assessment of the valuation of goodwill and acquired intangible assets and determined these to be designed and placed in operation;

We examined management's methodology, as detailed in section 3.2 of the consolidated financial statements, and models for assessing the valuation of significant goodwill balances to confirm the composition of management's future cash flow forecasts, and the process by which they were drawn up. This included confirming that the underlying cash flows were consistent with the Board approved budgets;

In accordance with the requirements of IAS 36 Impairment of Assets, management performed an impairment test on all CGUs that have goodwill allocated.

For all CGUs we calculated the degree to which the key assumptions would need to fluctuate before an impairment conclusion was triggered and considered the likelihood of this occurring.

In respect of the CGUs identified as having impairment indicators or low levels of head room we performed detailed testing to critically assess and corroborate the key inputs of the forecast cash flows including:

- corroborating the discount rate used by obtaining the underlying data used in the calculation and benchmarking it against comparable organisations;
- validating the growth rate assumed by comparing them to economic and industry forecasts; and
- analysing the historical accuracy of budgets to actual results to determine whether forecast cash flows are reliable based on past experience.

We considered the appropriateness of the amortisation rates and useful economic lives of intangible assets allocated to CGUs on acquisition with reference to their expected usage and future economic inflows.

We obtained evidence of increased cross-selling within the Critical businesses and interdependencies of cash flows within this division. We confirmed the change in internal reporting has occurred and the CGUs considered for impairment testing are aligned to this new basis of internal reporting on financial performance.

The audit procedures performed to address this risk have been performed by the group audit team.



**What we concluded to the Audit Committee:**

We concurred with management's conclusion that none of the CGUs are required to be impaired as at 31 December 2015. Based on the change in the way in which cash inflows are generated and the changes in the associated internal reporting structure, we consider the CGUs to be appropriate.

*SECOND MOST RANKED KAM IN THE MANUFACTURING INDUSTRY: TAXATION AND REGULATION***Venezuela — political and associated risks**

At 31 December 2015 the Group's net assets in Venezuela amounted to €101 million. The economy, which is heavily dependent on oil revenues, is hyper-inflationary and there are extensive exchange controls and multiple exchange rates. The Group is exposed to a number of risks in relation to its operations in Venezuela, where the political climate continues to be volatile and the operating environment is complex. The principal risks and uncertainties with respect to Venezuela are outlined in the Directors' Report on page 43 and the key judgements and estimates are set out in Note 3. The choice of the appropriate rate to consolidate the results for Venezuela is a key judgement.

The Group changed the rate at which it consolidates its Venezuelan operations as at 31 March 2015 from the Sicad rate to a new official exchange rate, Sistema Marginal de Divisas — ('Simadi'). The Group believes that the Simadi rate is the rate at which it extracts economic benefit. The Simadi rate at 31 December 2015 was Venezuelan Bolivar Fuerte ('VEF') 198.7 per US dollar compared to the Sicad rate of VEF 13.5 per US dollar. The impact of this change at 31 March 2015 was to reduce the Group's net assets by €573 million and its cash balances by €96 million.

We focused on this area due to the political and associated risks, the existence of multiple exchange rates which are materially different and the importance of the judgement made by the Directors in determining the appropriate exchange rate to use for consolidation of the Venezuelan operations.

**Our response to the area of focus**

We read public pronouncements by the Venezuelan Government and authorities and other appropriate commentators and we discussed the operating environment in detail with our PwC Venezuelan audit team.

We considered the latest guidance issued by relevant accounting bodies in relation to hyper-inflationary accounting and the appropriate accounting where there is a choice between multiple exchange rates. We assessed the Directors' choice of the Simadi exchange rate for consolidation by reference to the Venezuelan authorities published regulations giving effect to the various rates together with actual experience in relation to availability of and rates for foreign currency transactions. We also considered the impact of exchange controls in relation to the cash balances within Venezuela.

We discussed these matters with group, divisional and local management, and the Audit Committee and we considered the Group's oversight framework and position in relation to these matters and, in particular, the Group's ability to continue to control the Venezuelan operations. We also considered the disclosures in the Annual Report in relation to these matters, including in respect of developments since the year end.

*THIRD MOST OFTEN RANKED KAM IN THE MANUFACTURING INDUSTRY: PROVISIONS***Provision for environmental remediation**

Refer to page 51 (Audit Committee Report), page 91 (Accounting Policies) and page 118 (notes).

As a consequence of the Group's production of chemicals, there are a number of open claims and litigation against the Group relating to soil and potential groundwater contamination on sites, both currently in use and previously occupied.

Environmental standards and legislation are specific to, and often contain unique requirements, in each territory the Group operates in and may be subject to change. As such, understanding the potential environmental risks and the financial implications that the Group is exposed to is often complex.

The provision held for environmental liabilities within the balance sheet at 31 December 2015 totaled 212.3m, which relates to a number of matters. For each matter, the Directors, in conjunction with experts they engaged, assessed the likelihood of the Group being found liable for any remedial work and, where applicable the costs of that work, as well as any associated fines and legal costs.

Assessing the likelihood and quantum of any financial obligations arising, requires judgement. There is a risk that the provision could be materially misstated and the required disclosures insufficient due to the inherent uncertainties and the potentially wide range of outcomes and timelines in respect of the resolution of each matter.

The Directors performed a detailed assessment of environmental liabilities to ensure that the level of environmental provision held remains appropriate.

**How our audit addressed the area of focus**

We obtained and read the Directors' assessment of each specific environmental matter that the Directors made us aware of, and assessed the completeness of the list against publicly available information and other information on potential environmental exposure at current and former sites. We performed audit work on each matter as there is a risk that the liability for each matter could be materially misstated.

We evaluated the Directors' assumptions, both in terms of the likelihood of the Group being found liable and also of any resulting financial obligation by:

reading publicly available information, correspondence with relevant stakeholders and other information available to the Directors relating to the specific matters identified, and assessing the Directors' assumptions against this information;

reading remediation plans drawn up by the Directors' external experts and considering whether the Directors have properly reflected them in the calculation of the provision;

evaluating the independence, objectivity and competence of the experts that the Directors engage to assess the likely outcome of the cases against the Group, and the cost of remediation needed, by confirming they are qualified and affiliated with the appropriate industry bodies in the respective local territory;

comparing historic provisions with actual remediation costs incurred during the year to assess the Directors' historical forecasting accuracy;

assessing the Directors' accuracy in estimating exposures for fines and legal costs by comparing historic provisions for cases that have been settled with the actual fine/legal costs;

discussing all matters with the Group's legal counsel and head of sustainability, and obtaining independent confirmations from the Group's external legal advisers on the progress of each claim; and discussing all matters arising in Europe and the US with local management, and corroborating information received from all parties.

We found, based on the results of our testing, that the provision recorded and disclosures made in the financial statements were consistent with the supporting evidence obtained.

*FOURTH MOST OFTEN RANKED KAM IN THE MANUFACTURING INDUSTRY: REVENUE RECOGNITION***The pressure on and incentives for management to meet revised revenue and profit guidance**  
**Refer to pages 22 to 41 (Business review) and pages 93 to 94 (Audit Committee report — Financial reporting)**

The risk —The Group has published a number of revisions to its revenue and profit guidance during the last two years with a generally decreasing trend in profit and revenue and there have been significant associated decreases in the Group's share price. Clear instructions were given to the Executive Leadership Team and the senior finance executives on more than one occasion not to take any account of the pressure to meet forecasts in preparing the financial results and to manage and be alert to how this pressure might affect personnel across the wider Group. Nevertheless, the continuing heightened pressure on and incentives for management to meet the latest guidance increases the inherent risk of manipulation of the Group financial statements. The financial results are sensitive to significant estimates and judgements, particularly in respect of revenues and costs associated with long-term contracts, and there is a broad range of acceptable outcomes of these that could lead to different levels

of profit and revenue being reported in the financial statements. Relatively small changes in the basis of those judgements and estimates could result in the Group meeting, exceeding or falling short of guidance.

The significance of the risk has increased marginally due to revisions to guidance issued during the year, continuing deterioration in the short-term business outlook and the incidence of individually significant items affecting profit.

**Our response** — We have: (i) extended our enquiries designed to assess whether judgements and estimates exhibited unconscious bias or whether management had taken systematic actions to manipulate the reported results; (ii) compared the results to forecasts and challenged variances at a much lower level than we would otherwise have done based on our understanding of factors affecting business performance with corroboration using external data where possible; and (iii) applied an increased level of scepticism throughout the audit by increasing the involvement of the senior audit team personnel, with particular focus on audit procedures designed to assess whether revenues and costs have been recognised in the correct accounting period, whether central adjustments were appropriate and whether the segmental analysis has been properly prepared.

In particular:

- when considering the risk relating to The measurement of revenue and profit in the Civil Aerospace business (refer to page 169), we challenged the basis for changes in the estimated revenues and costs in long-term contracts, with a heightened awareness of the possibility of unconscious or systematic bias, particularly regarding the refinement in the basis of measurement of the risk contingency for forecasts of future revenue to be earned under long-term contracts which resulted in recognition of profit of £189m;
- when considering the risk relating to Recoverability of intangible assets in the Civil Aerospace business (refer to page 170), we challenged with a heightened awareness of the possibility of unconscious or systematic bias the basis for changes in the estimated maintenance costs which led to the reversal of the impairment on certain Trent 1000 launch engine Contractual aftermarket rights ("CARs") assets and a related provision which resulted in recognition of profit of £65m and avoidance of impairments of £22m that otherwise would have been recorded;
- when considering the risk relating to The basis of accounting for revenue and profit in the Civil Aerospace business (refer below), we challenged the basis on which management had accounted for a sale of engines and a long-term service agreement as a single arrangement which resulted in recognition of profit of E44m despite there being a significant period of time between concluding these agreements; and
- when considering the risk relating to The presentation of underlying profit (refer to page 171) and the risk relating to Disclosure of the effect on the trend in profit of items which are uneven in frequency or amount (refer to page 172), we sought to identify items that affected profit (and/or the trend in profit) unevenly in frequency or amount (especially those where management had a greater degree of discretion over the timing or scale of transactions entered into) at a much lower level than we would otherwise have done and to assess the balance and transparency of disclosure of these items.

**Our findings** — Our testing did not identify any indication of manipulation of results (2014 audit finding: one instance which was corrected by management). We found the degree of caution/ optimism adopted in estimates to be slightly less cautious than

in the previous year, but balanced overall. We found that there was ample unbiased disclosure of items affecting the trend in profit.

*FIFTH MOST OFTEN RANKED KAM IN THE MANUFACTURING INDUSTRY: EMPLOYEE BENEFITS***Retirement benefit obligations (£4.7bn)**

Refer to page 66 (Audit Committee report) and pages 139 to 148 (accounting policy and financial disclosures)

**Audit risk**

The Group's share of the pension schemes' net deficit was £4.7bn after allocating £1.1bn to equity accounted investments and other participating employers.

Previously, all allocations to participating employers were based on the relative payroll contributions of active members.

In 2015, BAE Systems and Airbus, the largest of the other participating employers, worked towards a sectionalisation of the BAE Systems Pension Scheme. On this basis, they have changed the method in respect of the allocation of the scheme assets and liabilities to Airbus.

There is a risk that the method does not accurately reflect the obligations of the two employers or that the resulting estimate may have been calculated incorrectly.

All other multi-employer allocations continue to be based on the previous method.

Given the size of the schemes, small changes in assumptions and estimates used to value the Group's retirement benefit obligations have a significant impact on the Group's share of the retirement benefit obligations.

**Procedures to address these audit risks included those listed below**

In respect of the change in allocation method:

We considered whether the updated method provides a more appropriate allocation of the deficit by challenging the key assumptions in the context of what we know about the business and member profile.

We assessed whether the allocation had been performed in line with this method, including:

- checking the allocation of a sample of members through to underlying data;
- using our actuarial specialists to roll forward the asset valuations from 31 March 2014, the point at which the split of the assets has been based, to the period end; and
- agreeing to correspondence between the two parties.

In respect of the multi-employer allocations: For all other allocations, we considered whether the methodology used, to allocate a proportion of the Group's retirement benefit obligations to the equity accounted investments and other participating employers, was appropriate. We assessed this estimate with reference to agreements between the Group and the equity accounted investments and other participating employers, which we examined.

In respect of the deficit valuation: We challenged the key assumptions supporting the Group's retirement benefit obligations valuation, with input from our own actuarial specialists. This included a comparison of the discount rate, inflation and life expectancy assumptions used against externally-derived data. In order to sense check the reasonableness of these assumptions, we performed a benchmarking exercise against comparator companies' assumptions.

In respect of the disclosures: We considered the adequacy of the Group's disclosures in respect of the key assumptions, including the sensitivity of the deficit to changes and in respect of the change in methodology of the allocation between participating employers.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the manufacturing industry

KAM	Manufacturing
Valuation of current assets	MARSHALLS
Valuation of non-current assets	ROLLS-ROYCE HOLDINGS PLC
Presentation and disclosure	ROLLS-ROYCE HOLDINGS PLC
Acquisitions	RPC GROUP PLC
Impairment	MORGAN ADVANCED MATERIALS
Valuation	JOHNSON MATTHEY PLC
Internal controls	WEIR GROUP PLC
Business combinations	EVRAZ PLC
Going concern	EVRAZ PLC

### **SIC CODE 41-49 Transportation and public utilities**

Out of the 350 constituents of the FTSE 350, 28 are active in the transportation and public utilities industry. Our dataset contains information about 19 of these companies. The transportation and public utilities industry is larger than the average industry as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

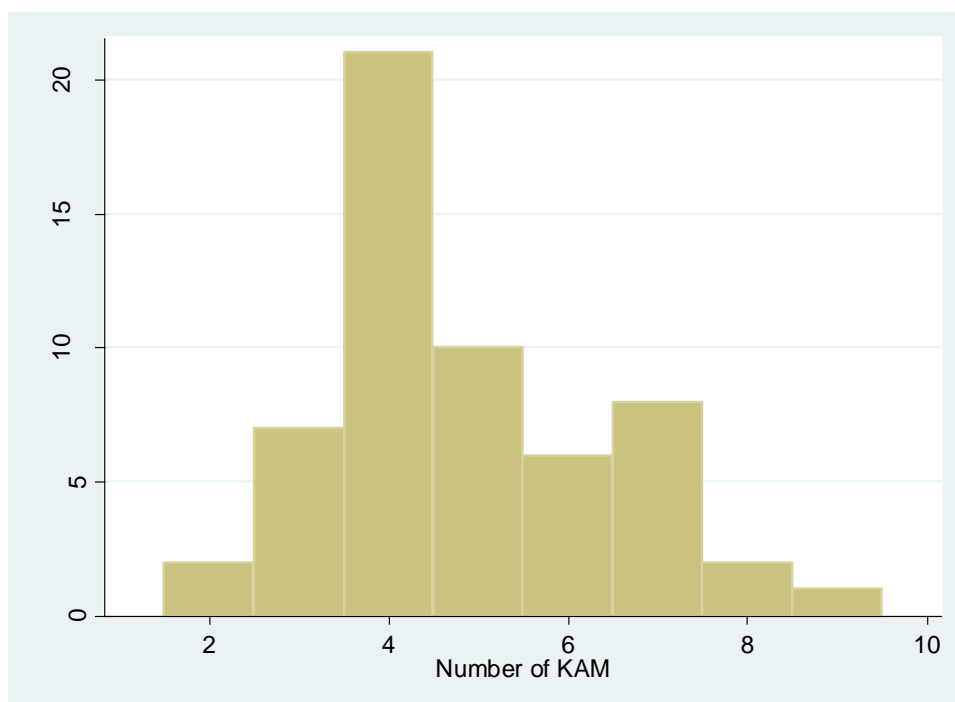
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	19	4.74	1.69	3	3	4	5	8
Number of KAM second year	19	4.95	1.47	2	4	5	6	7
Number of KAM third year	19	4.84	1.61	2	4	4	6	9
Number of KAM all years	57	4.84	1.57	2	4	4	6	9

**Table 1: The number of KAM in the transportation and public utilities industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median of KAMs is not constant over time. It should be noted that the variance is high (1.57), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAMs, some firms receive 9 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals the maximum amount of KAM: 4.



**Figure 1: Histogram of the number of KAM in the transportation and public utilities industry over the three year period**



Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	19	827	386.95	156	594	783	1161	1499
Length second year	19	1374	626.25	571	791	1173	1734	2920
Length third year	19	1478	617.56	595	1090	1289	1584	2923
Length all years	57	1226	616.32	156	790	1122	1499	2923

**Table 2: Descriptive statistics of the length of the KAM section in the transportation and public utilities industry**

Table 2 shows that the number of words of the KAM section equals on average 1226 words (median value of 1122 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 156 words and 2923 words).

Although there is an annual decrease in the number of KAM, the length shows a mild increase over the 3 years. Table 2 shows that the average length of the KAM section increases every year. Given the number of KAM is decreasing over time (see Table 1), this illustrates that the average length of a KAM discussed in the transportation and public utilities industry increases from 175 in the first year to an average of 305 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 9, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the transportation and public utilities industry discloses 4 KAMs (i.e. 276 KAMS in total for the 57 firm year observations) with an average length of 1226 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (22.10%) followed by provisions (15.58%), goodwill (10.51%) and employee benefits (9.42%). The category ‘Other’ includes KAM such as acquisitions, taxation and regulation, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a revenue recognition KAM decreases over time (from 26.67% to 21.74%), while the occurrence of goodwill remains stable (from 10.00% to 9.78%). Employee benefits become more important as they increase every year (from 8.89% to 9.78%).

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM decreases, the content of the KAM discussion section changes over time with more emphasis on goodwill and less emphasis on revenue recognition.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	26.67%	18.09%	21.74%	22.10%
Second most disclosed	Provisions	13.33%	19.15%	14.13%	15.58%
Third most disclosed	Goodwill	10.00%	11.70%	9.78%	10.51%
Fourth most disclosed	Employee benefits	8.89%	9.57%	9.78%	9.42%
Fifth most disclosed	Other	41.11%	41.49%	44.57%	42.39%

**Table 3: Type of KAM most often disclosed in the transportation and public utilities industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM	Ninth KAM
Revenue recognition	24.59%	29.51%	11.48%	19.67%	8.20%	4.92%	0.00%	1.64%	0.00%
Provisions	18.60%	25.58%	27.91%	9.30%	9.30%	6.98%	2.33%	0.00%	0.00%
Goodwill	55.17%	10.34%	6.90%	6.90%	10.34%	0.00%	0.00%	0.00%	0.00%
Employee benefits	0.00%	3.85%	38.46%	30.77%	3.85%	15.38%	7.69%	0.00%	0.00%
Other	15.38%	20.51%	20.51%	18.80%	11.97%	5.98%	4.27%	1.71%	8.54%

**Table 4: Sequence of the five KAMs most often discussed in the transportation and public utilities industry**

Although goodwill is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Similarly, although revenue recognition is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second KAM. Finally, important to note is that revenue recognition also appears as fifth or sixth KAM in the KAM section, which probably indicates that they are added to be complete (probably also explained by the ISA standards).

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (91.67%), only 8.33% uses revenue. That revenue as the materiality base is an exception is also shown by the absolute number which only equals 1 firm year observation.

Looking at the materiality level used, Q1 shows that 75% or more of the firms active in the transportation and public utilities industry use a materiality level of 5% or higher with a maximum of 13.3%.

Base	obs	Frequency of the base	Materiality level used (%)						
			Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1 Profit before tax	57	100	5.22	1.28	4	5	5	5	13.3

**Table 5: The applied materiality level in the transportation and public utilities industry**

### 3) Summary of the main findings in the transportation and utilities industry

In the transportation and public utilities industry the median number of KAM mentioned is 4 with an average length of 254 words per KAM. The content of the KAM section changes with more emphasis on goodwill and less emphasis on revenue recognition. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that transportation and utilities is an industry with an equal amount of KAMs mentioned as the whole sample.

	Transportation and public utilities	Total sample
Number of KAM (median)	4	4
Length per KAM	254	305
Most common type	1. Revenue recognition 2. Provisions 3. Goodwill 4. Employee benefits 5. Taxation & regulation	1. Revenue recognition 2. Valuation of non-current assets 3. Taxation & regulation 4. Goodwill 5. Provisions

**Table 6: Summary table of the main findings in the transportation and public utilities industry**

## Appendix 1: Frequency table of the KAMs disclosed in the transportation and public utilities industry

KAM	Frequency	Percentage
Revenue recognition	61	22.10
Provisions	43	15.58
Goodwill	29	10.51
Employee benefits	26	9.42
Taxation and regulation	21	7.61
Valuation of non-current assets	18	6.52
Financial instruments	17	6.16
Presentation and disclosure	12	4.35
Internal controls	11	3.99
Acquisitions	10	3.62
Valuation of current assets	9	3.26
Valuation	6	2.17
Other	5	1.81
Impairment	4	1.45
Going concern	2	0.72
Business combination	1	0.36
IT	1	0.36
Total	276	100

**Table 7: Frequency table of the different types of KAM (three year period) in the transportation and public utilities industry**

**Appendix 2: Example of the longest KAM in the transportation and public utilities industry**

Centrica plc (2015 - Impairment, 769 words)

**Impairment assessment**

The Group has £4.6 billion of property, plant and equipment, the majority of which relates to gas production and storage assets and power generation assets, £1.8 billion of intangible assets and £2.0 billion of goodwill, arising predominantly from historical acquisitions in Centrica Energy Exploration & Production in Europe.

Impairment assessments of these assets require significant judgement and there is the risk that valuation of the assets may be incorrect and any potential impairment charge miscalculated.

The value of Centrica's assets is supported by either value in use calculations, which are based on future cash flow forecasts or fair value less costs of disposal. Market conditions in 2015 have been very challenging. Falling forecast oil and gas prices have had a significant impact on the Exploration & Production business and outages and falling power prices have put pressure on power generation. These unfavourable macro-economic factors have heightened the possibility of a decline in the assets' value in use and fair values. As a result, taking account of declining oil, gas and power prices and expected future performance, the Directors have determined that certain Exploration & Production assets and power generation assets, including the associated goodwill, are impaired. This has resulted in a total pre-tax impairment charge of £1,004 million being recognized in relation to the UK, The Netherlands and Norwegian gas and oil assets, £210 million being recognized on Canadian Exploration & Production assets and £42 million in relation to gas assets in Trinidad and Tobago. A further impairment charge of £609 million was recognized in relation to goodwill.

Also, in assessing their value in use as a result of the significant fall in spark spreads and low capacity markets, the Group has recognized a pre-tax impairment charge of £31 million in relation to the assets held under a finance lease on the Spalding power station. The Group also recognized a pre-tax impairment charge of £372 million on its nuclear investment, due to declining forecasts of base load power prices and capacity market auction prices.

Impairment indicators were identified for the Storage facility following operational issues and declining market spreads. No impairment charge was recorded however the model remains highly sensitive to key assumptions.

Refer to pages 56 and 57 for details on the Audit Committee reviews.

**How our audit addressed the area of focus**

and conclusions and notes 3, 7, 13, 15 and S2 in the financial statements. We assessed and challenged the impairment analysis prepared by the Directors as outlined below.

With regard to the overall impairment assessments performed by the Directors we evaluated the design of internal controls in place to check that the Group's assets are valued appropriately including those controls in place to determine any asset impairments or impairment reversals.

We also reviewed the assets not assessed by management for impairment indicators and no indicators were identified.

We evaluated the Directors' assumptions and estimates used to determine the recoverable value of the gas production and storage assets, power generation assets, intangible assets, and goodwill. This includes those relating to operating cost forecasts and expected production profiles. We tested these assumptions by reference to third party documentation where available, such as commodity price forecasts, and consultation with operational management. We used PwC valuation specialists to help us assess the commodity prices and discount rates used by the Directors. We benchmarked these to external data and challenged the assumptions based on our knowledge of the Group and its industry. In addition we tested management's sensitivity and stress test scenarios and found they had applied appropriate judgement.

With regard to both the international Exploration & Production assets and power generation assets we focused on the Directors' assertion that the fall in forecast commodity prices has been the key driver of impairment. We did this through discussions with management to understand the basis of their forecasts, comparing them to available industry data, including price and consumption, and performing sensitivity analysis on their assessments. We also challenged the Directors on the assessment of exceptional 'one-off' drivers, such as commodity prices, that have impacted value as opposed to operational issues incurred in the normal course of business.

We challenged the key assumptions used in each impairment model and performed sensitivity analysis around key drivers of cash flow forecasts, including output volumes, commodity prices, operating costs and expected life of assets.

Based on our analysis and the analysis performed by our valuations team, we did not identify any material issues with the valuation of international Exploration & Production, storage, power generation assets and goodwill, the accuracy of the impairment charges and the disclosures in the financial statements.

**Appendix 3: Longest KAMs of the five most common KAMs in the transportation and public utilities industry****FIRST RANKED KAM IN THE TRANSPORTATION AND PUBLIC UTILITIES INDUSTRY: REVENUE RECOGNITION****Downstream revenue recognition**

The accuracy of the recognition of energy services revenue within British Gas, Direct Energy and Bord Gals and its presentation in the income statement is dependent on complex estimation methodologies/algorithms used to assess the amount of energy supplied to customers between the date of the last meter reading and the year end (unread) Unread gas and electricity comprises both billed and unbilled revenue The specific risk over unread revenue is the accuracy of the estimation Where an unread estimate is billed this gives the customer opportunity to challenge the amount which when applicable can lead to the correction of estimates Where unread estimates are unbilled there are risks over accuracy, recoverability and therefore correct recognition in the income statement and balance sheet

Furthermore, migration issues arising from the implementation of a new billing system in British Gas Business in 2014 have resulted in the need for management to perform additional levels of review over revenue and debt including judgements over the level of provisioning

Refer to pages 56 and 57 for details on the Audit Committee reviews and conclusions and notes 3 and 4 in the financial statements

**Our response**

In order to test the accuracy of the unread billed and unbilled revenue at British Gas and Bard Gals, we assessed the IT general controls system application controls and management controls in relation to the revenue and billing systems. Our testing found that the IT general controls and system application controls were sufficient to enable us to place reliance on the controls for the year end audit In Direct Energy our testing found that certain manual controls were sufficient to enable us to obtain some audit evidence from the operation of manual controls for the year-end audit.

Given the relatively short time period between the end of the financial year and the audit, the majority of unbilled revenue as at 31 December remained unbilled and uncollected. We therefore focused our substantive testing on the manual processes over revenue recognition assessing the appropriateness of the estimation methodologies and the level of subsequent true-ups to actual bills raised We also tested the reconciliation of unbilled reports to the general ledger at the yearend. Where manual adjustments were made to the unbilled revenue we challenged the basis of the adjustments made, the source of the data used and the consistency of the adjustments with prior years to confirm we were comfortable with the adjustments.

In assessing the methodology used to derive the unbilled revenue at the balance sheet date and testing the performance of historical billing and collections, we did not identify any material issues with the recognition of unbilled revenue.

With regard to the implementation of the new billing system in British Gas Business we increased our scope of work in order to assess the impact of the migration of customers to the new system, specifically on revenue, debt and debt provisioning This included testing the revenue adjustments, recoverability of debt and additional procedures over the debt provision at yearend.

Based on our work we did not identify any material misstatements with downstream revenue recognition.

*SECOND MOST RANKED KAM IN THE TRANSPORTATION AND PUBLIC UTILITIES INDUSTRY: PROVISIONS***Aircraft maintenance provisions**

The Group operates aircraft which are owned or held under finance or operating lease arrangements. Liabilities for maintenance costs are incurred during the term of the lease in respect of aircraft leased under operating leases. These arise from legal and contractual obligations relating to the condition of the aircraft when it is returned to the lessor.

Maintenance provisions of £205 million for aircraft maintenance costs in respect of aircraft leased under operating leases were recorded in the accounts at 30 September 2015 (refer to notes 1 and 16 to the accounts).

At each balance sheet date, the maintenance provision is calculated using a model that incorporates a number of variable factors and assumptions including: likely utilisation of the aircraft; the expected cost of the heavy maintenance check at the time it is expected to occur; the condition of the aircraft; and the lifespan of life-limited parts.

We focused on this area because of an inherent level of management judgement required in calculating the amount of provision needed as a result of the complex and subjective elements around these variable factors and assumptions.

**How our audit addressed the area of focus**

We evaluated the maintenance provision model and tested the calculations therein. This included assessing the process by which the variable factors within the provision were estimated, evaluating the reasonableness of the assumptions, testing the input data and reperforming calculations. We found no material exceptions from these procedures.

In particular, we challenged the key assumptions that were based on the Group's internal data, such as business plans and maintenance contract terms. We performed sensitivity analysis around the key drivers of the model. We also evaluated the provision and the key assumptions in the light of actual utilisation in the year. We found no material exceptions from these assessments and comparisons.

Having ascertained the magnitude of movements in those key assumptions, that either individually or collectively would be required for the provision to be misstated, we considered the likelihood of such movements arising and any impact on the overall level of aircraft maintenance provisions recorded in the accounts. Our assessment as to likelihood and magnitude did not identify any material exceptions.



*THIRD MOST OFTEN RANKED KAM IN THE TRANSPORTATION AND PUBLIC UTILITIES INDUSTRY: GOODWILL***Carrying value of goodwill**

Vodafone Group Plc has goodwill of £22,789 million contained within 22 cash generating units ('CGUs').

Impairment charges to goodwill have been recognised in prior periods. With challenging trading conditions continuing in certain territories, the Group's performance and prospects could be impacted increasing the risk that goodwill is impaired.

For the CGUs that contain goodwill, the determination of recoverable amount, being the higher of fair value less costs to sell and value-in-use, requires judgement on the part of management in both identifying and then valuing the relevant CGUs. Recoverable amounts are based on management's view of variables such as future average revenue per user, average customer numbers and customer churn, timing and approval of future capital, spectrum and operating expenditure and the most appropriate discount rate.

In the year ended 31 March 2016, a pre-tax impairment charge of £450 million was recognised related to goodwill in Romania.

Refer to the Audit and Risk Committee Report, note 1 — Critical accounting judgements and key sources of estimation uncertainty, note 4 — Impairment losses and note 10 — Intangible assets.

**How our audit addressed the area of focus**

We evaluated the appropriateness of management's identification of the Group's CGUs and the continued satisfactory operation of the Group's controls over the impairment assessment process.

Our procedures included challenging management on the suitability of the impairment model and reasonableness of the assumptions, with particular attention paid to the European businesses, through performing the following:

- benchmarking Vodafone's key market-related assumptions in management's valuation models with industry comparators and with assumptions made in the prior years including revenue and margin trends, capital expenditure on network assets and spectrum, market share and customer churn, foreign exchange rates and discount rates, against external data where available, using our valuation expertise;
- testing the mathematical accuracy of the cash flow models and agreeing relevant data to Board approved Long-Range Plans; and
- assessing the reliability of management's forecast through a review of actual performance against previous forecasts.

We validated the appropriateness of the related disclosures in note 4 and note 10 of the financial statements, including the sensitivities provided with respect to Germany, Spain, and Romania.

Based on our procedures, we noted no exceptions and consider management's key assumptions to be within a reasonable range.

*FOURTH MOST OFTEN RANKED KAM IN THE TRANSPORTATION AND PUBLIC UTILITIES INDUSTRY: EMPLOYEE BENEFITS***Pension scheme obligations and unquoted investments in the BT Pension Scheme and the EE Pension Scheme**

We focused on the BT Pension Scheme (BTPS) because the valuation of the BT Pension Scheme obligations (£49.1bn) and unquoted investments (£15.8bn) require the use of estimates and significant judgement, and a small change in the assumptions can have a material impact on the financial statements.

The EE Pension Scheme (EEPS) has significantly lower obligations (£710m) and unquoted investments (£99m). We focused on the EE Pension Scheme because the valuation of the obligations and unquoted investments also requires the use of estimates and significant judgement.

**How our audit addressed the area of focus**

We evaluated the design and tested the operating effectiveness of controls in respect of the determination of the pension scheme obligations in the BTPS. We determined these controls to be operating and this provided us with evidence over the obligations.

We used our actuarial experts to assess the reasonableness of actuarial assumptions used in valuing pension scheme obligations. The assumptions used were consistent with our internally developed benchmarks.

The pension assets include significant unquoted pension asset investments. We tested the existence of the unquoted investments and the valuation of these investments on a sample basis. Specifically:

- For property assets in BTPS, we tested internal controls at the property fund manager and obtained valuation reports prepared by third party specialist valuers. We assessed the methods and assumptions used by the valuers.
- For direct investments held by the BTPS, the valuations of the investments are derived from discounted cash flow models. We assessed the assumptions used in the valuations by checking that the assumptions used were consistent with our internally developed range of discount rates, by comparing the cash flows to historical results and considering the impact of other external information. We tested the accuracy of the calculations and assessed whether the assumptions used were in line with other market participants and reflected the particular status of the investment shareholding.
- For other unquoted investments in both schemes we obtained confirmations from the custodians and the investment managers.

We considered the estimates and judgements used by the directors for the obligations and the unquoted investments to be within an acceptable range.

*FIFTH MOST OFTEN RANKED KAM IN THE TRANSPORTATION AND PUBLIC UTILITIES INDUSTRY: TAXATION AND REGULATION***Taxation matters**

The Group operates across a large number of jurisdictions and is subject to periodic challenges by local tax authorities on a range of tax matters during the normal course of business including transfer pricing, indirect taxes and transaction related tax matters. As at 31 March 2016, the Group has current taxes payable of £540 million.

We have focused on two matters relating to the legal claim in respect of withholding tax on the acquisition of Hutchison Essar Limited and the recognition and recoverability of deferred tax assets in Luxembourg and Germany.

Provisioning claim for withholding tax—there continues to be uncertainty regarding the resolution of the legal claim from the Indian authorities in respect of withholding tax on the acquisition of Hutchison Essar Limited.

Recognition and recoverability of deferred tax assets in Luxembourg and Germany—significant judgement is required in relation to the recognition and recoverability of deferred tax assets, particularly in respect of losses in Luxembourg and Germany. During the current year, £3,207 million of deferred tax assets have been utilised or de-recognised connected with the revaluation of investments for Luxembourg GAAP purposes.

Refer to the Audit and Risk Committee Report, note 1—Critical accounting judgements and key sources of estimation uncertainty, note 6—Taxation and note 30—Contingent liabilities and legal proceedings.

**Our response**

We evaluated the design and implementation of controls in respect of provisioning for withholding tax and the recognition and recoverability of deferred tax assets.

We used our specialist tax knowledge to gain an understanding of the current status of the Indian tax investigation and monitored changes in the disputes by reading external advice received by the Group, where relevant, to establish that the tax provisions had been appropriately adjusted to reflect the latest external developments.

In respect of the deferred tax assets, we assessed the recoverability of losses from a tax perspective through performing the following:

- understanding how losses arose and where they are located, including to which subgroups they are attributed;
- considering whether the losses can be reversed;
- assessing any restrictions on future use;
- evaluating the results of local statutory impairment assessments including reversals; 4 considering the impact of recent regulatory developments, as applicable; and
- determining whether any of the losses will expire.

In addition we assessed the application of International Accounting Standard 12—Income Taxes including:

- understanding the triggers for recognition and derecognition of deferred tax assets; 4 considering effects of tax planning strategies; and
- assessing recoverability of assets against forecast income streams, including reliability of future income projections.

We determined that the carrying value of deferred tax assets at 31 March 2016 was supported by management's plans including intercompany funding arrangements.

We validated the appropriateness of the related disclosures in note 6 and note 30 of the financial statements, including the enhanced disclosures made in respect of the utilisation period of deferred tax assets.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the transportation and public utilities industry

KAM	Transportation and public utilities
Valuation of non-current assets	PENNON GROUP PLC
Financial instruments	CENTRICA PLC (2)
Presentation and disclosure	CLARKSON PLC
Internal controls	VODAFONE GROUP PLC
Acquisitions	CLARKSON PLC
Valuation of current assets	CLARKSON PLC
Valuation	BBA AVIATION PLC
Other	VODAFONE GROUP PLC
Impairment	CENTRICA PLC
Going concern	CENTRICA PLC

### **SIC CODE 52-59 Retail trade**

Out of the 350 constituents of the FTSE 350, 50 are active in the retail trade industry. Our dataset contains information about 45 of these companies. The retail trade industry is amongst the largest ones in the sample.

#### **1) Number and length of KAM**

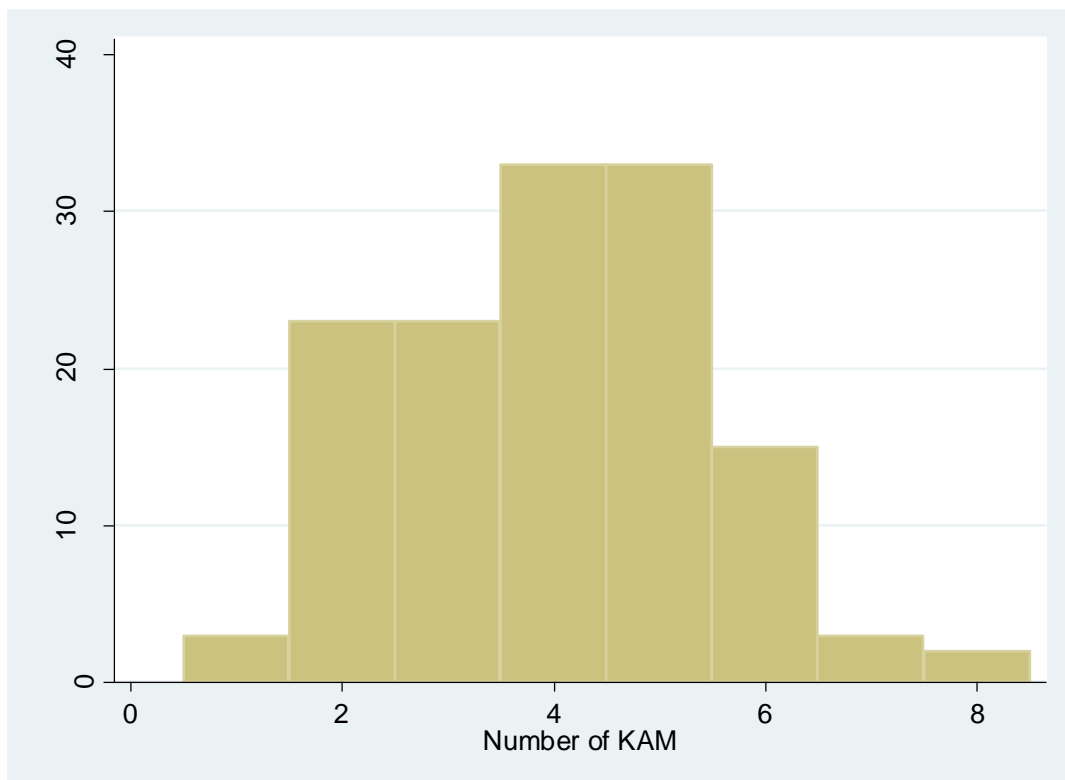
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	45	4.2	1.32	2	3	4	5	7
Number of KAM second year	45	3.98	1.62	1	3	4	5	8
Number of KAM third year	45	3.87	1.50	1	3	4	5	8
Number of KAM all years	135	4.01	1.48	1	3	4	5	8

**Table 1: The number of KAM in the retail trade industry**

Looking at the total sample period of 3 years we observe that the median number of KAM equals 4. The median of KAMs is constant over time. It should be noted that the variance is high (1.48), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive as many as 8 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we see that the number of KAMs most frequently given in the audit report equal 4 or 5.



**Figure 1: Histogram of the number of KAM in the retail trade industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	45	741	414.67	44	438	770	996	1848
Length second year	45	1305	828.10	264	644	1013	1741	3474
Length third year	45	1459	759.29	235	841	1335	1919	3361
Length all years	135	1168	752.90	44	624	912	1569	3474

**Table 2: Descriptive statistics of the length of the KAM section in the retail trade industry**

Table 2 shows that the number of words of the KAM section equals on average 1168 words (median value of 912 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 44 words and 3474 words).

Although the number of KAM remains constant, the length shows a strong increase over the three years, especially from the first to the second year. Table 2 shows that the average length of the KAM section increases every year. Given the number of KAM is constant over time (see Table 1), this illustrates that the average length of a KAM discussed in the retail trade industry increases from 177 in the first year to an average of 378 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 8, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the retail trade industry discloses 4 KAMs (i.e. 542 KAMS in total for the 135 firm year observations) with an average length of 1168 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (17.90%) followed by taxation and regulation (11.07%), goodwill (10.89%) and provisions (9.96%). The category 'Other' includes KAM such as acquisitions, presentation and disclosure, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of revenue recognition significantly decreases (from 20.11% to 16.67%), while taxation and regulation (from 9.52% to 12.07%) and goodwill (from 8.99% to 12.07%) become more important.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM remains constant, the content of the KAM discussion section changes over time with more emphasis on taxation and regulation and less emphasis on revenue recognition.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	20.11%	16.76%	16.67%	17.90%
Second most disclosed	Taxation and regulation	9.52%	11.73%	12.07%	11.07%
Third most disclosed	Goodwill	8.99%	11.73%	12.07%	10.89%
Fourth most disclosed	Provisions	9.52%	10.61%	9.77%	9.96%
Fifth most disclosed	Other	51.86%	49.17%	49.42%	50.18%

**Table 3: Type KAM most often disclosed in the retail trade industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM
Revenue recognition	35.05%	21.65%	19.59%	16.49%	5.15%	2.06%	0.00%	0.00%
Taxation and regulation	6.67%	35.00%	35.00%	5.00%	8.33%	5.00%	3.33%	1.67%
Goodwill	49.15%	16.95%	15.25%	13.56%	3.39%	1.69%	0.00%	0.00%
Provisions	20.37%	33.33%	11.11%	24.07%	7.40%	3.70%	0.00%	0.00%
Other	20.96%	22.79%	19.85%	16.91%	13.60%	4.41%	1.10%	0.37%

**Table 4: Sequence of the five KAMs most often discussed in the retail trade industry**

Revenue recognition is the KAM most often discussed in the audit report, this is also reflected in its appearance in the report. If mentioned, the revenue recognition KAM appears in 35.05% of the cases as the first KAM. It should also be noted that goodwill often appears as the first KAM as well. Similarly taxation and regulation will often appear as the second or third KAM in the audit report.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (91.85%), 5.93% uses revenue and only 2.22% uses EBITDA as a base to determine materiality.

Looking at the materiality level used, Q1 shows that the materiality level most often applied in the retail trade industry equals 5% or higher with a maximum of 8.6%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	124	91.85	5.06	0.82	1	5	5	5	8.6
2	Revenue	8	5.93	1.60	2.10	0.4	0.455	0.5	2.75	5
3	EBITDA	3	2.22	3.5	0	3.5	3.5	3.5	3.5	3.5

**Table 5: The applied materiality level in the retail trade industry**

### 3) Summary of the main findings in the retail trade industry

In the retail trade industry the median number of KAM mentioned is 4 with an average length of 291 words per KAM. While the number of KAM remains constant over the three years studied, the content of the KAM section changes with more emphasis on goodwill and taxation and regulation. Revenue recognition is the most common KAM and, if mentioned, it appears most often first in the KAM section. That valuation of current assets appears in the top 5 of the KAMs discussed in the retail industry is not that surprising given the characteristics of the industry. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that retail trade is an industry with an equal amount of KAMs mentioned as the whole sample.

	Retail Trade	Total sample
Number of KAM (median)	4	4
Length per KAM	291	305
Most common type	1. Revenue recognition 2. Taxation & regulation 3. Goodwill 4. Provisions 5. Valuation of current assets	1. Revenue recognition 2. Valuation of non-current assets 3. Taxation & regulation 4. Goodwill 5. Provisions

**Table 6: Summary table of the main findings in the retail trade industry**



## Appendix 1: Frequency table of the KAMs disclosed in the retail trade industry

KAM	Frequency	Percentage
Revenue recognition	97	17.90
Taxation and Regulation	60	11.07
Goodwill	59	10.89
Provisions	54	9.96
Valuation of current assets	45	8.30
Impairment	42	7.75
Employee benefits	36	6.64
Valuation of non-current assets	30	5.54
Internal controls	29	5.35
Presentation and disclosure	27	4.98
Acquisitions	23	4.24
Valuation	12	2.21
Other	9	1.66
Business combination	8	1.48
Financial instruments	6	1.11
IT	5	0.92
Total	542	100

**Table 7: Frequency table of the different types of KAM (three year period) in the retail trade industry**

**Appendix 2: Example of the longest KAM in the retail trade industry**

WM Morrison Supermarkets plc (2016 – Revenue recognition, 1154 words)

**Area of focus: Commercial income and promotional funding**

Refer to note 1.1 (Accounting policies), page 59 (Critical accounting estimates and judgements) and notes 1.6,5.2,5.3 and 5.4.

**Commercial income**

The Group has two categories of commercial income: marketing and advertising funding and volume based rebates on purchases.

Commercial income is recognised as a deduction from cost of sales and is earned over the period of the contractual agreements with individual suppliers, as disclosed in the Group's accounting policy on page 60. The total income recognised in the income statement in a year is based on the expected entitlement earned up to the balance sheet date under each supplier agreement and requires management to apply judgement based on the contractual terms in place with each of its suppliers together with estimates of amounts the Group is entitled to where transactions span the financial period end.

The relative level of judgement in each category of commercial income is considered below:

**Commercial income — marketing and advertising funding**

This income is varied with regards to the nature and timing of the activity to which it relates, and is recognised in accordance with written agreements with suppliers. This income is based on specific agreements, and its recognition requires limited judgement or estimation by management in determining the amount that the Group is entitled to. Our focus was on assessing whether a written agreement for the marketing and advertising funding existed, whether the relevant marketing or advertising had taken place and whether the income recognised was recorded in the appropriate period.

**Commercial income — volume based rebates**

Volume based rebates are driven by the Group achieving purchase volume targets set by individual suppliers for specific products over a pre-determined period. There is therefore judgement involved in estimating the volume of purchases, particularly where rebate agreements span a financial period end. In order to narrow this judgement, management endeavors to structure agreements to coincide with the Group's financial period end, thereby reducing or eliminating the degree of estimation. In instances where the rebate agreement does not fully coincide with the period end the key judgement that we focused on was the estimate of commercial income to be accrued at the period end.

**Promotional funding**

The Group separately recognises promotional funding on promotions that are partially funded by suppliers.

Promotional funding is an automated deduction from cost of sales, triggered when a sale is recognised. The funding is recognised when the transaction occurs in accordance with the terms of supplier agreements. The amount receivable is wholly based on sales volumes achieved, multiplied by rates agreed with each supplier up-front.

We focused on promotional funding because of the significance of the amounts to the Group's gross profit, the significant number of transactions and agreements in place with suppliers covering a range of periods and the industry wide focus on this area of accounting. However we acknowledge that the level of judgement and subjectivity in the calculations is lower because of the level of automation. Our focus was on whether a written agreement for the promotional funding existed, whether the relevant promotion had taken place, and whether the funding recognised was recorded in the appropriate period.

**How our audit addressed the area of focus**

Our audit work in respect of commercial income and promotional funding comprised a combination of controls testing, substantive testing of a sample of income and funding recognised during the period, testing of amounts recognised in the balance sheet and an assessment of the Group's disclosures in this area. Each element of our work is considered in more detail below.

**Controls testing**

Our controls work encompassed understanding, evaluating and testing management's key controls in respect of the recognition of both commercial income and promotional funding. These key controls included the monitoring of invoices raised and the accuracy of confirmations from suppliers. We found no significant deficiencies in these key controls, and our testing of management's key system controls contributed to our evidence in determining whether commercial income and promotional funding had been recorded appropriately and in the correct period.

**Income statement testing**

We requested confirmations directly from suppliers, in respect of a sample of commercial income and promotional funding. The confirmations received allowed us to evaluate whether commercial income or promotional funding had been appropriately recognised in the period, as well as assessing the validity of accruals made at the period end. We noted a small number of exceptions in our testing, which were manual input errors and not areas of judgement, and resulted in a £22,500 net over recognition of promotional funding (£31,700 of errors resulting in over recognition net of £9,200 errors resulting in under recognition). The net over recognition represented 0.02% of the total sample of invoices.

We also analysed commercial income and promotional funding recognised each month and compared it to the previous period to identify whether there were any unusual trends in the amounts or timing of commercial income and promotional funding recognised in each period. We also considered management's Key Performance Indicators in this analysis, including the aging profile of accrued and deferred income and levels of cash collection. No unusual trends were identified.

**Balance sheet testing**

We wrote to a sample of suppliers, and obtained independent evidence of the value and timing of commercial income and promotional funding to evaluate whether it had been recognised in the correct period. We also agreed a sample of accrued income to evidence of post-year end cash receipt, or offset from trade creditors, where relevant. We performed cut-off procedures and credit note testing to provide further evidence to support the timing of the recognition of both commercial income and promotional funding. Cut-off work involved testing a sample of commercial income and promotional funding recognised both pre and post the period end and evaluating by reference to documentation from suppliers that the timing of recognition was appropriate. We found no issues as a result of our audit procedures.

Our credit note testing focused on credit notes raised after the period end in order to identify any instances of commercial income or promotional funding being subsequently reversed. We did not identify any exceptions from this work. We tested the recoverability of invoiced commercial income and promotional funding (unsettled balances included within trade debtors in note 5.3 to the financial statements and where the Group does not have the right of offset against trade creditors). This testing was performed by agreeing a sample to proof of settlement post year end. We assessed the ageing of both outstanding commercial income and promotional funding debtors together with understanding the details of any disputes, and obtained explanations from management to assess whether any provisions were appropriate. No exceptions were noted.

**Disclosures**

We read the disclosures within the Annual report in respect of commercial income and promotional funding and, based on our work, determined that they are consistent with accounting standards and the guidance on the reporting of complex supplier arrangements issued by the Financial Reporting Council.

**Appendix 3: Longest KAMs of the five most common KAMs in the retail trade industry****FIRST RANKED KAM IN THE RETAIL TRADE INDUSTRY: REVENUE RECOGNITION****Commercial income and promotional funding**

Refer to note 1.1 (Accounting policies), page 59 (Critical accounting estimates and judgements) and notes 1.6, 5.2, 5.3 and 5.4.

**Commercial income**

The Group has two categories of commercial income: marketing and advertising funding and volume based rebates on purchases.

Commercial income is recognised as a deduction from cost of sales and is earned over the period of the contractual agreements with individual suppliers, as disclosed in the Group's accounting policy on page 60. The total income recognised in the income statement in a year is based on the expected entitlement earned up to the balance sheet date under each supplier agreement and requires management to apply judgement based on the contractual terms in place with each of its suppliers together with estimates of amounts the Group is entitled to where transactions span the financial period end.

The relative level of judgement in each category of commercial income is considered below:

**Commercial income — marketing and advertising funding**

This income is varied with regards to the nature and timing of the activity to which it relates, and is recognised in accordance with written agreements with suppliers. This income is based on specific agreements, and its recognition requires limited judgement or estimation by management in determining the amount that the Group is entitled to. Our focus was on assessing whether a written agreement for the marketing and advertising funding existed, whether the relevant marketing or advertising had taken place and whether the income recognised was recorded in the appropriate period.

**Commercial income — volume based rebates**

Volume based rebates are driven by the Group achieving purchase volume targets set by individual suppliers for specific products over a pre-determined period. There is therefore judgement involved in estimating the volume of purchases, particularly where rebate agreements span a financial period end. In order to narrow this judgement, management endeavors to structure agreements to coincide with the Group's financial period end, thereby reducing or eliminating the degree of estimation. In instances where the rebate agreement does not fully coincide with the period end the key judgement that we focused on was the estimate of commercial income to be accrued at the period end.

**Promotional funding**

The Group separately recognises promotional funding on promotions that are partially funded by suppliers.

Promotional funding is an automated deduction from cost of sales, triggered when a sale is recognised. The funding is recognised when the transaction occurs in accordance with the terms of supplier agreements. The amount receivable is wholly based on sales volumes achieved, multiplied by rates agreed with each supplier up-front.

We focused on promotional funding because of the significance of the amounts to the Group's gross profit, the significant number of transactions and agreements in place with suppliers covering a range of periods and the industry wide focus on this area of accounting. However we acknowledge that the level of judgement and subjectivity in the calculations is lower because of the level of automation. Our focus was on whether a written agreement for the promotional funding existed, whether the relevant promotion had taken place, and whether the funding recognised was recorded in the appropriate period.

**How our audit addressed the area of focus**

Our audit work in respect of commercial income and promotional funding comprised a combination of controls testing, substantive testing of a sample of income and funding recognised during the period, testing of amounts recognised in the balance sheet and an assessment of the Group's disclosures in this area. Each element of our work is considered in more detail below.

**Controls testing**

Our controls work encompassed understanding, evaluating and testing management's key controls in respect of the recognition of both commercial income and promotional funding. These key controls included the monitoring of invoices raised and the accuracy of confirmations from suppliers. We found no significant deficiencies in these key controls, and our testing of management's key system controls contributed to our evidence in determining whether commercial income and promotional funding had been recorded appropriately and in the correct period.

**Income statement testing**

We requested confirmations directly from suppliers, in respect of a sample of commercial income and promotional funding. The confirmations received allowed us to evaluate whether commercial income or promotional funding had been appropriately recognised in the period, as well as assessing the validity of accruals made at the period end. We noted a small number of exceptions in our testing, which were manual input errors and not areas of judgement, and resulted in a £22,500 net over recognition of promotional funding (£31,700 of errors resulting in over recognition net of £9,200 errors resulting in under recognition). The net over recognition represented 0.02% of the total sample of invoices.

We also analysed commercial income and promotional funding recognised each month and compared it to the previous period to identify whether there were any unusual trends in the amounts or timing of commercial income and promotional funding recognised in each period. We also considered management's Key Performance Indicators in this analysis, including the aging profile of accrued and deferred income and levels of cash collection. No unusual trends were identified.

**Balance sheet testing**

We wrote to a sample of suppliers, and obtained independent evidence of the value and timing of commercial income and promotional funding to evaluate whether it had been recognised in the correct period. We also agreed a sample of accrued income to evidence of post-year end cash receipt, or offset from trade creditors, where relevant. We performed cut-off procedures and credit note testing to provide further evidence to support the timing of the recognition of both commercial income and promotional funding. Cut-off work involved testing a sample of commercial income and promotional funding recognised both pre and post the period end and evaluating by reference to documentation from suppliers that the timing of recognition was appropriate. We found no issues as a result of our audit procedures.

Our credit note testing focused on credit notes raised after the period end in order to identify any instances of commercial income or promotional funding being subsequently reversed. We did not identify any exceptions from this work. We tested the recoverability of invoiced commercial income and promotional funding (unsettled balances included within trade debtors in note 5.3 to the financial statements and where the Group does not have the right of offset against trade creditors). This testing was performed by agreeing a sample to proof of settlement post year end. We assessed the ageing of both outstanding commercial income and promotional funding debtors together with understanding the details of any disputes, and obtained explanations from management to assess whether any provisions were appropriate. No exceptions were noted.

**Disclosures**

We read the disclosures within the Annual report in respect of commercial income and promotional funding and, based on our work, determined that they are consistent with accounting standards and the guidance on the reporting of complex supplier arrangements issued by the Financial Reporting Council.

*SECOND MOST RANKED KAM IN THE RETAIL TRADE INDUSTRY: TAXATION AND REGULATION***Completeness, existence and accuracy of current and deferred tax (net current tax liability: £19.5m, 2015: £13.9m, net deferred tax asset: £6.0m, 2015: £1.9m)**

Refer to the Audit Committee report on page 35, notes 1 and 2 on page 70, note 8 on page 75 and note 13 on page 79.

**The risk**

The Group operates in numerous tax jurisdictions. The interpretation of tax law can be complex and judgemental. Differences in tax laws may have a significant impact on how the Group calculates its current and deferred tax liabilities. Additionally, the outcomes of tax audits and related tax provisions may be different to those anticipated by the Group. The amount and timing of recognition of deferred tax assets involves judgement, as it is based on specific considerations, such as the future profitability of the business in various jurisdictions, local tax law and availability of temporary differences, such as an excess of capital allowances over depreciation or tax losses. During the current year, the Group has continued to demonstrate tax profits following a history of tax losses in some jurisdictions indicating that deferred tax assets in the relevant jurisdictions can be recovered. Therefore this is one of the key judgement areas on which our audit is focused.

**Our response**

In this area, our audit procedures were as follows:

- We used our own tax specialists to assist us in assessing and challenging the assumptions and judgements made by the Group. We considered all significant differences between the statutory and effective rates in each jurisdiction and assessed whether adjustments from accounting profit to taxable profit are in accordance with local laws.
- We considered the tax provisions made by the Group and the underlying assumptions.
- In assessing the Group's calculations, we have used our knowledge of recent tax cases and our awareness of the pattern of recent tax settlements. We have also considered developments in the attitudes of tax authorities globally and discussed issues with management in order to determine whether the tax provisions made by the Group were reasonable.
- In assessing the level of deferred tax asset balances recognised in the consolidated balance sheet, we compared the assumptions used in respect of future taxable income to the Group's long-term forecasts and budget for the relevant jurisdictions.
- We considered whether the improving performance in certain jurisdictions, where there were unrecognised deferred tax assets, amounted to convincing evidence sufficient to support the recognition of deferred tax assets. In addition to profitability, we also considered other factors, such as the expected timing of reversal of temporary differences, any restrictions in accessing such temporary differences, and other qualitative factors specific to each of the jurisdictions in question.
- We also assessed the adequacy of the Group's disclosures in respect of current and deferred taxes.



*THIRD MOST OFTEN RANKED KAM IN THE RETAIL TRADE INDUSTRY: GOODWILL***Assessment of the carrying value of goodwill and other relevant assets**

Refer to page 34 (Other financial information), pages 40 to 47 (Risk management/Principal risks and uncertainties), pages 70 to 75 (Audit & Risk Committee report), note 1 (Accounting policies and presentation) and note ii (Goodwill and other intangible assets).

We focused on this area because the Directors' assessment of whether or not certain elements of goodwill and other relevant assets were impaired, and the level of impairment to be booked if applicable, involved complex and subjective judgements and assumptions about the progress and future results of the Group's Cash-Generating Units (CGUs).

In particular, we focused on the carrying values of material CGUs for Aerospace St. Louis in North America (£8 million of goodwill) and Aerospace Astech in North America (£13 million of goodwill and £13 million of other relevant assets).

The Directors have recorded total impairment charges of £71 million relating to the Aerospace St. Louis CGU (£49 million), the Aerospace Astech CGU (£14 million) and other impairment charges totalling £8 million.

No impairment triggers had been identified by the Directors in respect of the remaining CGUs and/or their impairment models determined that adequate headroom existed not to result in the need for an impairment charge in reasonably possible scenarios.

**How our audit addressed the area of focus**

We understood and tested the Directors' impairment models around the key business drivers of the cash flow forecasts supporting their recoverability assessments. We also evaluated the appropriateness of the key assumptions including the discount rate and long term growth rate applied.

For the Aerospace St. Louis CGU, where the Directors recognised an impairment charge of £49 million, we focused on the key assumptions of future revenue expectations and cost reduction activities. We were able to evaluate the reasonableness of the Directors' forecast by substantiating their assumptions regarding the amount of future revenue by agreeing this to contractual terms and assessing the margin expected to be achieved by reference to historical margin and margin improvement plans.

In the Aerospace Astech CGU, where the Directors recognised an impairment charge of £14 million, the key assumption we focused on was the future revenue profile, given the loss of a key programme with Boeing during the year. The key factor we considered was forecast margin on other programmes with reference to historical margin achieved on similar programmes.

We also validated the inputs used by the Directors to calculate the discount rate applied by using our specialists to compare this to the cost of capital for the Group and a selection of comparable organisations. The Directors' key assumptions for long term growth rates were also compared to economic and industry forecasts for reasonableness.

We assessed, through the performance of sensitivity analysis over the key assumptions above, the extent of change in those assumptions that either individually or collectively would be required for the impairment charges to be materially different to those amounts recognised. We also assessed the likelihood of such changes occurring.

As a result of our audit work, we determined that the impairment charges for the Aerospace St. Louis and Aerospace Astech CGUs were within a range of potential likely outcomes based on the current plans which reflect the Directors' best estimate of the value in use of the CGUs.

In addition, based on our audit work, in respect of the remaining CGUs, the Directors' assessment that no impairment charge is required to be recognised was supportable. However, certain models are sensitive to



revenue growth and margin improvement targets which, if delayed or not achieved, could reasonably be expected to give rise to further impairment charges in the future.

The methodology applied by management is consistent with that applied in 2014 and whilst the CGUs considered are in some instances different, the judgments taken in totality remain supportable.

*FOURTH MOST OFTEN RANKED KAM IN THE RETAIL TRADE INDUSTRY: PROVISIONS***Provisions (net charge in year £1.2 million, provision in balance sheet £5.6 million)**

Refer to page 46 (Audit Committee report), pages 76 and 79 (accounting policy) and page 97 (financial disclosures).

**The risk**

The Group leases the majority of its shops and has almost 1,500 shop leases at the end of the year. It is therefore exposed to the risk of onerous leases and dilapidation costs.

Where shops are closed prior to the end of the lease term or are not trading sufficiently well to recover the committed lease costs there is a risk that an element of the lease will be onerous. Determining the level of onerous lease provisions involves estimation of the length of time and cost at which lease arrangements can be exited and forecasting and discounting future cash flows, both of which are inherently uncertain.

The level of dilapidation provision involves estimation of the costs anticipated to make good any alterations to properties as required by lease agreements.

**Our response**

Our audit procedures in respect of property provisions included:

In respect of onerous lease provisions recognised we critically assessed whether the provisions identified by the Directors met the criteria for recognition. We considered the completeness of provisions for all leases where the unavoidable costs of meeting the lease obligation may exceed the economic benefit expected to be received under the lease through the identification of shops closed during the year, poorly performing shops and those identified for provision in the prior year.

For all onerous leases provided for, we tested the mathematical accuracy and challenged the reasonableness of the Group's model for calculating the provision, as well as agreeing key inputs such as lease term, break clauses and rental value to the relevant lease agreements.

For closed shops we critically assessed the Directors' estimate of total costs to exit the lease by challenging key assumptions including the time it would take to exit, the level of incentives to sublease or penalties to be paid to landlords and other costs to exit or sublet a shop such as legal fees or dilapidation costs. We also considered the most recent expectation of the relevant local in-house property surveyor responsible for each shop, supported by third-party evidence including offers made, communications with third-party agents or contracts agreed to surrender or sublease properties. We considered the historical experience of the Group at exiting similar properties and the costs involved in doing so. We also considered the location of each closed shop and the impact this may have on the time and costs expected to exit these leases as well as the possible income from subletting these shops if possible.

We challenged the Directors' assumptions relating to onerous lease provisions for shops still trading. This included consideration of the discounted cash flow forecasts on a shop-by-shop basis and assessing the cash flow forecasts against the historical performance of those shops and against the Group's budgets.

For dilapidation provisions we critically assessed whether provisions identified by the Directors met the criteria for recognition. We also considered the completeness of provisions including the consideration of shops where there is indication of likely dilapidation exposure taking into account historical experience of the Group. We considered the historical experience of the Group in respect of likely level of dilapidation costs. We considered specific issues on certain Group properties, such as the shops which previously had in-store bakeries, and critically assessed the impact of these on the provisions made.

We have also considered the adequacy of the Group's disclosures about the degree of estimation involved in arriving at the provisions and the sensitivity to key assumptions involved. We continued to perform procedures over the impairment of property, plant and equipment. However, following the improved performance of the Group, we have not assessed this as one of the risks that had the greatest effect on our audit and, therefore, it is not separately identified in our report this year.

*FIFTH MOST OFTEN RANKED KAM IN THE RETAIL TRADE INDUSTRY: VALUATION OF CURRENT ASSETS***Inventory valuation using the retail method -- provisioning for out-of-season inventory**

Refer to pages 46 to 49 (Audit Committee report) and note 5 to the financial statements for the directors' disclosures of the critical accounting estimates and judgements related to the valuation of inventory.

The valuation of inventory in the UK and Ireland is determined using the retail method. This is an industry specific accounting method used to derive a weighted average product cost. This method relies on a number of inputs including selling price, assumed margin and quantity. The methodology is also impacted by the timing of processing markdowns which could significantly affect gross margin. Due to differences in the systems used, inventory in Magasin du Nord is valued using a cost based method which is less complex and therefore this risk is not applicable to that reporting unit.

Furthermore, the ongoing pressure on consumer spending within the retail sector continues to create competition on the high street, especially in non-essential categories such as fashion. This could put pressure on the level of out-of-season stock identified for markdown within the Group. As such there is a risk that the realisable value of inventory will be lower than its recorded cost. This risk is relevant to Debenhams Retail plc, Debenhams Retail (Ireland) Limited and Magasin du Nord as these are the only reporting units that hold inventory.

**How our audit addressed the area of focus**

Due to the reliance management places on the various stock systems used within the Group, we evaluated the IT controls over the relevant systems and tested the internal controls over the inventory valuation process including the process of recording inventory on receipt and agreement of inventory invoices to proof of receipt and purchase orders. This work gave us assurance over the processing of the inputs into management's margin calculations which are the basis of the inventory valuation.

We also tested interfaces between the Group's systems to ensure that sales prices used in the valuation were consistent with those prices in the store till system. Our testing did not note any issues between systems.

We obtained evidence over the quantities of inventory through assessing the Group's controls by attending a sample of inventory counts at stores and distribution centres and reviewing the results of those counts not attended. No significant issues were noted regarding existence or accuracy of inventory.

We reviewed departmental level margins against the prior year margins for unusual fluctuations, with none being identified.

We also assessed the level of out-of-season inventory at the year end, including testing management's controls in relation to classifying inventory as current, continuity (inventory with no season) or out-of-season inventory. We also assessed the spend on mark downs in the month following the year-end and the level of out-of-season inventory at the end of this period to check the reasonableness of the judgement involved in the markdown provisions applied to the year-end inventory valuation. Our testing noted that the controls in place were operating effectively for the purposes of our audit and no unusual patterns were noted through examining post yearend markdowns.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the retail trade industry

KAM	Retail trade
Impairment	MARKS & SPENCER GROUP PLC
Employee benefits	OCADO GROUP PLC
Valuation of non-current assets	OCADO GROUP PLC
Internal controls	GREENKING PLC
Presentation and disclosure	DIAGEO PLC
Acquisitions	EUROMONEY
Valuation	RECKITT BENCKISER GROUP PLC (2)
Business combination	GREENKING PLC
Financial instruments	NEXT PLC
IT	J SAINSBURY PLC
Other	GKN PLC



### **SIC CODE 60-61 Depository institutions**

We combine the (non-)depository institutions and exchange services and treat them as one industry to which we will refer as depository institutions.

Out of the 350 constituents of the FTSE 350, 34 are active as depository institutions. Our dataset contains information about 25 of these companies. The industry is amongst the larger ones in the sample as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

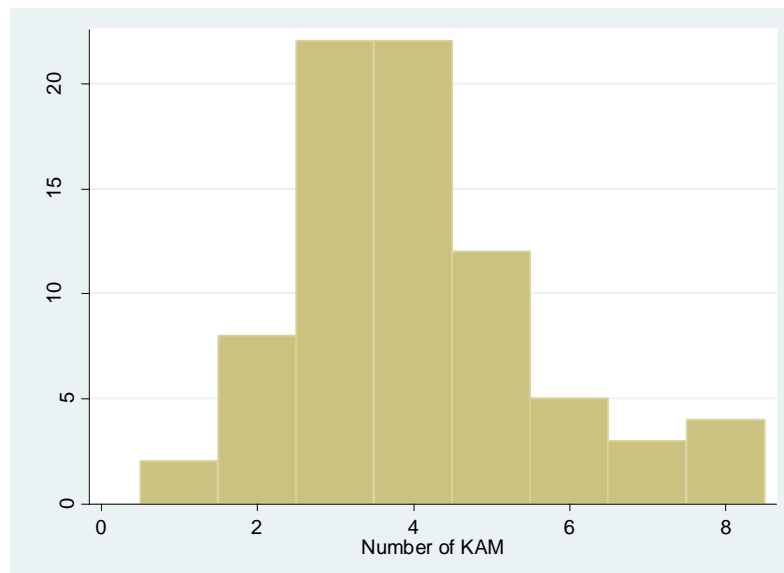
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	26	4.08	1.29	2	3	4	5	8
Number of KAM second year	26	4.08	1.78	1	3	4	5	8
Number of KAM third year	26	4	1.72	1	3	4	5	8
Number of KAM all years	78	4.04	1.59	1	3	4	5	8

**Table 1: The number of KAM in the depository institutions industry**

Looking at the total sample period of 3 years we observe that the median number of KAM equals 4. The median of KAMs remains constant over time at an average level of 4 KAMs. It should be noted that the variance is high (1.59), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive 8 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 3 and 4.



**Figure 1: Histogram of the number of KAM in the depository institutions industry over the three year period**

Table 2 provides the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	26	941	515	213	643	853	1285	2133
Length second year	26	1628	907	546	1063	1422	1955	4775
Length third year	26	1692	904	250	1067	1504	2130	4225
Length all years	76	1420	857	213	854	1248	1810	4775

**Table 2: Descriptive statistics of the length of the KAM section in the depository institutions industry**

Table 2 shows that the number of words of the KAM section equals on average 1420 (median value of 1248 words) using the three years as the sample period. We also observe a very high variance between the minimum and the maximum value of the KAM length (between 213 words and 4775 words). In spite of the average number of KAM remaining constant, the length shows a high increase from the first to the second year and a more moderate increase from the third to the fourth year. This also explains why the average length of a KAM discussed increases from 231 words in the first year to an average of 423 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 8, see Table 1).

## 2) Type and sequence of KAM

While we already know that depository institutions receive 4 KAMs on average (i.e. 315 KAMS in total for the 76 firm year observations) with an average length of 1420 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (19.05%) followed by impairment (13.97%), taxation and regulation (9.52%) and provisions (8.57%). The category 'Other' includes the other KAMs, which individually have lower frequencies than 8.57% of the provisions. These include KAMs related to acquisitions, valuation of current and non-current assets, presentation and disclosure... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of revenue recognition (from 18.87% to 20.19%) and taxation and regulation (from 9.43% to 9.62%) remains relatively stable over time, while the importance of impairment (from 11.32% to 15.38%) and provisions (from 7.55% to 9.62%) increases, which is not that surprising given the characteristics of the industry.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM remains constant, the content of the KAM discussion section changes over time with more emphasis on impairment and provisions.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	18.87%	18.10%	20.19%	19.05%
Second most disclosed	Impairment	11.32%	15.24%	15.38%	13.97%
Third most disclosed	Taxation and regulation	9.43%	9.52%	9.62%	9.52%
Fourth most disclosed	Provisions	7.55%	8.57%	9.62%	8.57%
Fifth most disclosed	Other	52.83%	48.57%	45.19%	48.89%

**Table 3: Type of KAM most often disclosed in the depository institutions industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the five most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM
Revenue recognition	25.00%	41.67%	16.67%	11.67%	1.67%	1.67%	1.67%	0.00%
Impairment	70.45%	20.45%	4.54%	2.27%	2.27%	0.00%	0.00%	0.00%
Taxation and regulation	0.00%	10.00%	13.33%	46.67%	16.67%	3.33%	6.66%	3.33%
Provisions	14.81%	25.93%	25.93%	14.81%	14.81%	3.70%	0.00%	0.00%
Other	18.18%	20.78%	29.22%	12.99%	8.44%	5.84%	2.60%	1.95%

**Table 4: Sequence of the five KAMs most often discussed in the depository institutions industry**

Although impairment is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Similarly, although revenue recognition is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second KAM. Finally, important to note is that revenue recognition also appears as sixth or seventh KAM, which probably indicates that they are added to be complete (probably also explained by the ISA standards).

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (88%), 6.67% uses net assets as a base, 4% uses equity and only 1.33% uses an 'other' base.

Looking at the materiality level used, Q1 shows that a materiality level of 5% is most commonly used in the depository institutions with a maximum of 10%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	66	88.00	5.34	1.10	3	5	5	5	10
2	Net assets	5	6.67	1	0	1	1	1	1	1
3	Equity	3	4.00	0.63	0.15	0.5	0.5	0.6	0.8	0.8
4	Other	1	1.33	0.7	/	0.7	/	/	/	0.7

**Table 5: The applied materiality level used in the depository institutions industry**



### 3) Summary of the main findings in the depository institutions industry

For the depository institutions the median number of KAM mentioned is 4 with an average length of 343 words per KAM. While the number of KAM remains stable over the three years studied, the content of the KAM section changes with more emphasis on impairment and provisions. Although impairment is relatively less important than revenue recognition, if mentioned it most often will appear as the first KAM. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that depository institutions is an industry with an equal amount of KAMs mentioned as the whole sample.

	Depository Institutions	Total sample
Number of KAM (median)	4	4
Length per KAM	343	305
Most common type	1. Revenue recognition 2. Impairment (first rank) 3. Taxation & regulation 4. provisions 5. Valuation of non-current assets	1. Revenue recognition 2. Valuation of non-current assets 3. Taxation & regulation 4. Goodwill 5. Provisions

**Table 6: Summary table of the main findings in the depository institutions industry**

Appendix 1: Frequency table of the KAMs disclosed in the depository institutions industry
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KAM	Frequency	Percentage
Revenue recognition	60	19.05
Impairment	44	13.97
Taxation and Regulation	30	9.52
Provision	27	8.57
Valuation of non-current assets	26	8.25
Employee benefits	25	7.94
Goodwill	25	7.94
Internal controls	21	6.67
Financial instruments	16	5.08
Acquisitions	14	4.44
Valuation	14	4.44
Other	5	1.59
IT	3	0.95
Business combinations	3	0.95
Presentation and disclosure	1	0.32
Valuation of current assets	1	0.32
Total	315	100

**Table 7: Frequency table of the different types of KAM (three year period) in the depository institutions industry**

**Appendix 2: Example of the longest KAM in the depository institutions industry**

Standard Chartered plc (2015 – Impairment, 1668 words)

**Risks and response**

The principal procedures we performed over these significant risks were as follows

Impairment of loans and advances

Risk and areas of focus

The risk is that the carrying value of loans and advances to banks and customers held at amortised costs may be misstated

Refer to the critical accounting estimates and judgements in note 1, the Audit Committee report on pages 79 to 84 and management's commentary on the disclosures of credit risk on pages 161 to 186

**Summary areas of focus**

- Indian Corporate & Institutional Clients and Commercial Clients loan exposures due to the slow progress in policy reforms and increased refinancing pressures
- Chinese Corporate & Institutional Clients and Commercial Clients loan exposures due to the slowdown and rebalancing of the economy and the devaluation of renminbi (RMB)
- Commodities and related exposures as commodity and oil prices continue to decline
- Commercial Client exposures particularly due to certain exposures to RMB in China, slowdown in India and the sensitivity of the exposure to decreases in commodity prices
- Liquidation portfolio due to the judgement required to assess a price at which the Group could sell impaired loans

With regard to the Group's Retail portfolio in South Korea, which we identified as a focus area in 2014, the risk of losses has continued to reduce in 2015, partly as a result of reduced claims by customers to restructure debt accompanied by continued portfolio reduction Accordingly, it has not been an audit focus area in 2015

**India**

The Group has reduced its India exposures to \$30 billion at 31 December 2015 (2014 \$35 billion) The slowdown observed in 2014 has continued into 2015 and the macroeconomic backdrop continues to be challenging with slow progress in reforms which were promised by the new government in 2014, continued high indebtedness in some sectors and tightening in refinancing by local banks Consequently, impairments have risen significantly in 2015, mainly driven by counterparties who were already stressed in 2014 (present on either early alert or in credit grades 12 to 14) In addition, there was also a change in underlying assumptions regarding prospects of recovery on available collateral due to the challenging market conditions and recent experience from recoveries on impaired accounts

Additionally, there has also been an increase in impairments as a result of the new strategic plan announced in November 2015, whereby a small number of impaired exposures have now been identified to be in the liquidation portfolio, where additional impairment was taken based on discounting revised cash flow projections based on expected sales value

**China**

China exposures amount to \$50 billion (2014 \$71 billion) and the Group has continued to take risk-mitigating actions in this portfolio This has resulted in the commodities and related exposures in China reducing and exposure to banks reducing to \$23.9 billion (2014 \$34.5 billion) China remained a challenging market, with growth slowing to 6.9 per cent in 2015 from 7.3 per cent in 2014, continued RMB devaluation against the US dollar, and volatility in Chinese equity markets In particular, the Group experienced increased losses within the Commercial Clients portfolio as counterparties struggled with increased levels of debt, lower commodity prices and the RMB devaluation

**Commodities and related exposures**

The Group continued to take risk-mitigation actions during the year Commodities and related exposures have reduced to \$54 billion (2014 \$70.6 billion), comprising \$20.3 billion of traders, \$19.3 billion of producers (including \$9.6 billion of oil and gas producers), \$5.9 billion of petroleum refineries, \$7.0 billion of support activities and \$1.5 billion of other corporate clients with oil and gas-related hedges.

The sustained fall in commodity prices, including oil price, has impacted a number of the Group's customers and translated into increased impairments for the year The majority of these impairments have arisen from customers who were already stressed in 2014

It should be noted that a fall in commodity prices may not necessarily result in a pervasive adverse impact on the entire commodities and related exposures but may impact certain pockets that are more exposed to a sustained fall in prices, for example, energy producers and some oil support services

**Commercial**

The total Commercial Clients loan portfolio of \$11.2 billion (2014 \$14.7 billion) is a small portfolio representing 3 per cent (2014 4 per cent) of total loans and advances However, the impairment charge on this portfolio increased to \$599 million in 2015 from \$212 million in 2014 mainly due to increased impairments in India, China, Africa and Korea

The Group has also revised its assumptions regarding recovery rates on impaired exposures downward leading to higher impairment This is mainly based on recent recovery experience and more stressed market conditions

**Liquidation portfolio**

As part of the announcement of the new strategic plan in November 2015, the Group identified \$7.9 billion of loans which were outside

the Group's risk tolerance levels and plan to liquidate this portfolio This included \$7.5 billion of gross non-performing which carries a provision

of \$3.5 billion \$968 million of this provision was taken for a small number of counterparties where the recovery was based on discounting revised cash flow projections based on expected sales values

## Our response

### Overview

Corporate & Institutional Clients, Commercial Clients, Private Banking Clients and loans and advances to banks (collectively 'Larger Clients') represents 71 per cent (\$233 billion) of the Group's net loan exposure, while Retail Clients represent 29 per cent (\$95 billion). The Larger Client's exposure comprises larger loans that are monitored individually, based on the knowledge of each individual borrower. However, the Retail clients exposure comprises much smaller value loans to a much greater number of customers. Accordingly, loans are not monitored on an individual basis, but are grouped by product into homogeneous exposures. Exposures are then monitored through delinquency statistics, which also drive the assessment of loan loss provisions.

### Procedures performed

Our audit procedures in all in-scope components included

- For both Larger Clients and Retail Clients, our in-country teams used their local knowledge to assess the trends in their local credit environments and considered the likely impact on the Group's exposures to focus their testing on key risk areas
- For Larger Clients, our procedures included
  - Testing the key controls over the credit grading and monitoring process, to assess if the risk grades allocated to counterparties were appropriate and loans were appropriately identified, on a timely basis, into early alert or credit grades 12 to 14
  - Performing credit assessments of all loans with a carrying value above \$40 million in credit grades 12, 13 and 14 (see pages 172 and 173) and loans above \$75 million on the Group's Early Alert Report (see page 209) together with a selection of other loans selected by country teams based on local materiality levels. For these selected loans, we assessed the reasonableness of the forecast of recoverable cash flows, realisation of collateral and other possible sources of repayment. We compared key assumptions to progress against business plans and our own understanding of the relevant industries and business environments. We also compared them, where possible, to externally derived evidence such as commodity prices, business performance and real estate valuations
  - Substantive testing of a selection of credit grade one to 11 counterparties in each scoped component to test the appropriateness of the credit grade
- For Retail Clients, the impairment process is based on projecting losses based on the prior historical payment performance of each client, adjusted for current market conditions. Our procedures included
  - Testing the accuracy of the key inputs into the models
  - For a selection of models, using our own valuation specialists to assess the appropriateness of the impairment calculation methodology and reviewing the results of the Group's validation of such models
  - Where model adjustments were made to reflect recent loss experience and current market conditions, we assessed the appropriateness of such adjustments
- For portfolio impairment provisions (PIP), our procedures included
  - Testing the key management controls over the input of underlying data into the models
  - Using our modelling specialists to evaluate the methodology and the key assumptions used in determining the estimate for both the Retail Clients and the Larger Clients and wherever possible, we compared the key assumptions used to externally available industry, financial and economic data

- Assessing the appropriateness of the emergence period and management adjustments to the output from models for changes in economic factors and specific risks to the exposure
- Overall assessment and reasonableness of the PIP balance with respect to the qualitative and quantitative changes in the underlying loan portfolio
- For the key underlying systems used for the processing of transactions we involved our information technology specialists to test a selection of automated controls within these systems We also tested the key controls over these underlying systems, for example, controls over access to systems and data and change management
- Assessing whether the financial statement disclosures appropriately reflect the Group's exposure to credit risk
- Our additional procedures in the particular risk areas of the portfolio, i e India, Commodities, China and Commercial exposure included
  - Reading management's own stress tests and risk-mitigation actions to identify areas of focus
  - Extending our audit coverage over the stressed sectors and geographies and, in particular, to certain components within these portfolios, for example, infrastructure and telecoms in India as well as lower-rated oil producers within Commodities and related exposures In doing so, we focused on the grading of the counterparties, assessed the quality of the ongoing portfolio monitoring controls, the tenor of the debt and the rate at which counterparties were moving into early alert and credit grades 12 to 14
  - Increasing the extent of Group audit team oversight over work done by the component team For example, the Senior Statutory Auditor visited Greater China and her delegate visited India
- For the liquidation portfolio, our additional procedures in respect of the impaired exposures involved assessing the key judgements, relating to recovery, namely the likely price and expected time to sell.

**Appendix 3: Longest KAMs of the five most common KAMs in the depository institutions industry****FIRST RANKED KAM IN THE DEPOSITORY INSTITUTIONS INDUSTRY: REVENUE RECOGNITION****Revenue recognition**

Refer to Note 1.1. Net revenue and Note 5.1. Basis of preparation and other accounting policies.

Revenue is the most significant balance in the Consolidated income statement. Revenue is made of a number of streams including:

- Gross management fees, £370.1m;
- Performance fees, £14.6m;
- Initial charges and box profits, £18.8m;

and results from the business activities of the Group.

We focused on a number of aspects of revenue as follows:

**-Gross management fees**

-The calculation of Unit Trust and SICAV gross management fees, which make up the majority of the revenue balance, is calculated as a percentage of the AUM of the funds managed by the Group. Assessing the AUM of these funds involves judgement as it is correlated to the market value of a range of financial instruments held by these funds. Various valuation methodologies are used to value those instruments, some straightforward and some more complex and judgemental, which leaves room for manipulation of the fund AUM and as such the gross management fee;

-The revenue from segregated mandates/investment trusts is manually calculated as a percentage, per Investment Management Agreements ('IMAs'), of the segregated mandates/investment trust holdings. The value of the holdings is provided by either the administrator or the segregated mandates/investment trusts, which are clients of the Group. Given the manual process in valuing these holdings the risk of misstatement through the manipulation of the valuations is increased; and

-Rebates are calculated by a combination of in-house systems and external parties mandated by the Group to sell units/ shares of funds it manages, with the outputs of both processes being monitored and stored on spreadsheets which increases the risk of error.

**Performance fees**

-Performance fees are often one-off or infrequent and involve complex calculations and this increases the risk of error.

**Initial charges and box profits**

-Initial charges vary per different client and contractual terms and the calculation of these fees are thus more susceptible to the risk of error; and

-Box profits vary from one transaction to another and are quite complex due to the various different terms and pricing in place and as such there is an increased risk of error

**How our audit addressed the area of focus**

We understood and evaluated the design and implementation of key controls, including relevant Information Technology systems and controls, in place around revenue. This included both in-house and outsourced activities at HSBC Security Services UK Limited (HSBC), J.P Morgan Bank Luxembourg S.A (JP Morgan), J.P Morgan Chase Bank N.A (JP Morgan) and International Financial Data Services Limited (IFDS).

To obtain audit evidence over the key controls, both in house and at the outsourced providers, supporting the calculation and recognition of revenue, we either:

- Performed testing of key controls to obtain evidence of operational effectiveness throughout the year; or
- Assessed the control environment in place to the extent that it was relevant to our audit. This assessment of the operating and accounting structure in place involved obtaining and reading the reports issued by the independent auditor of the third party providers in accordance with generally accepted assurance standards for such work. We then identified those key controls on which we could place reliance to provide audit evidence. Where the controls reports we relied on were not prepared as at 31 December 2015, we obtained a bridging letter and assessed the period not covered.

We found that the key controls on which we placed reliance for the purposes of our audit were designed, implemented and operating effectively.

The specific audit evidence over each revenue stream is summarised below:

**Gross management fees**

- For the Unit Trusts we obtained evidence over the valuation of AUM by identifying those key controls in the HSBC control reports and in-house controls and performed detailed testing which included repricing and existence testing over investments to corroborate the AUM valuation;
- For the SICAVs we obtained evidence over the valuation of AUM by identifying and relying on those key controls in the JP Morgan control report as mentioned above;
- We obtained AUM and management fee evidence direct from JP Morgan and HSBC. We then reconciled management fees either calculated by the administrators or recalculated by us to amounts included in the Group financial statements; and
- We reconciled a sample of management fee rates to the prospectuses published on Jupiter's website or other supporting documentation.

**Segregated mandates/investment trusts**

HSBC are appointed the administrator for segregated mandates unless the client specifies otherwise. For those in our testing sample administered by HSBC we obtained evidence over the AUM as explained above. For clients in our sample where Jupiter are not responsible for administration, the AUM information came from third parties;

- For the investment trusts we obtained evidence over the AUM through confirming the operating effectiveness of key controls through evaluating the JP Morgan control report;
- We reformed the management fee calculation over a sample of invoices agreeing a sample of the key inputs back to source documentation including the IMA and compared to amounts booked; and
- Manually recalculated a sample of management fees.

**Rebates**

- We used data auditing techniques on the underlying data to recalculate the SICAV rebates computed by the fund administrators. We relied on controls at JP Morgan for the value of the holdings and pricing, agreed a sample of rates to discount forms signed by the clients of the Group and reconciled the amounts back to the general ledger;



-We used data auditing techniques to recalculate the Unit Trust rebates computed by IFDS or Jupiter's rebate calculator system. We relied on controls for the value of the holdings and pricing and agreed a sample of rates to discount forms signed by the clients of the Group; and

-We agreed the classification of amounts between rebates and renewal commissions by confirming for a sample whether the discounts had been paid to end investors or to intermediaries. To do this we looked at the discount forms signed by the investors and at the agent websites.

**Performance fees**

For a sample of performance fees we assessed whether the fee had crystallised and hence had been recognised in the appropriate year;

-We reformed the computation of performance fees for that sample to check that it had been calculated in accordance with the signed IMAs; and

-To test for completeness we assessed whether a sample of eligible but unearned performance fees should have been earned in the year.

**Initial charges and box profits**

-We used data auditing techniques to recompute initial charges calculated by Jupiter's calculation system and box profits calculated by IFDS's calculation tool and reconciled the results back to the general ledger;

-Based on work over controls explained above we relied on key controls at IFDS; and

-Agreed the rate and terms to the discount forms for a sample of clients paying initial charges.

**Based on our work:**

-Revenue has been appropriately measured and recognised in accordance with the various contractual agreements in place with customers and service providers; and

-The judgements made by management were supportable and reasonable in the context of materiality.

**SECOND MOST RANKED KAM IN THE DEPOSITORY INSTITUTIONS INDUSTRY: IMPAIRMENT****Impairment of loans and advances**

The risk is that the carrying value of loans and advances to banks and customers held at amortised costs may be misstated

Refer to the critical accounting estimates and judgements in note 1, the Audit Committee report on pages 79 to 84 and management's commentary on the disclosures of credit risk on pages 161 to 186

Summary areas of focus

- Indian Corporate & Institutional Clients and Commercial Clients loan exposures due to the slow progress in policy reforms and increased refinancing pressures
- Chinese Corporate & Institutional Clients and Commercial Clients loan exposures due to the slowdown and rebalancing of the economy and the devaluation of renminbi (RMB)
- Commodities and related exposures as commodity and oil prices continue to decline
- Commercial Client exposures particularly due to certain exposures to RMB in China, slowdown in India and the sensitivity of the exposure to decreases in commodity prices
- Liquidation portfolio due to the judgement required to assess a price at which the Group could sell impaired loans

With regard to the Group's Retail portfolio in South Korea, which we identified as a focus area in 2014, the risk of losses has continued to reduce in 2015, partly as a result of reduced claims by customers to restructure debt accompanied by continued portfolio reduction. Accordingly, it has not been an audit focus area in 2015

**India**

The Group has reduced its India exposures to \$30 billion at 31 December 2015 (2014 \$35 billion). The slowdown observed in 2014 has continued into 2015 and the macroeconomic backdrop continues to be challenging with slow progress in reforms which were promised by the new government in 2014, continued high indebtedness in some sectors and tightening in refinancing by local banks. Consequently, impairments have risen significantly in 2015, mainly driven by counterparties who were already stressed in 2014 (present on either early alert or in credit grades 12 to 14). In addition, there was also a change in underlying assumptions regarding prospects of recovery on available collateral due to the challenging market conditions and recent experience from recoveries on impaired accounts.

Additionally, there has also been an increase in impairments as a result of the new strategic plan announced in November 2015, whereby a small number of impaired exposures have now been identified to be in the liquidation portfolio, where additional impairment was taken based on discounting revised cash flow projections based on expected sales value.

**China**

China exposures amount to \$50 billion (2014 \$71 billion) and the Group has continued to take risk-mitigating actions in this portfolio. This has resulted in the commodities and related exposures in China reducing and exposure to banks reducing to \$23.9 billion (2014 \$34.5 billion). China remained a challenging market, with growth slowing to 6.9 per cent in 2015 from 7.3 per cent in 2014, continued RMB devaluation against the US dollar, and volatility in Chinese equity markets. In particular, the Group experienced increased losses within the Commercial Clients portfolio as counterparties struggled with increased levels of debt, lower commodity prices and the RMB devaluation.

**Commodities and related exposures**

The Group continued to take risk-mitigation actions during the year. Commodities and related exposures have reduced to \$54 billion (2014 \$70.6 billion), comprising \$20.3 billion of traders, \$19.3 billion of producers (including \$9.6 billion of oil and gas producers), \$5.9 billion of petroleum refineries, \$7.0 billion of support activities and \$1.5 billion of other corporate clients with oil and gas-related hedges.

The sustained fall in commodity prices, including oil price, has impacted a number of the Group's customers and translated into increased impairments for the year. The majority of these impairments have arisen from customers who were already stressed in 2014.

It should be noted that a fall in commodity prices may not necessarily result in a pervasive adverse impact on the entire commodities and related exposures but may impact certain pockets that are more exposed to a sustained fall in prices, for example, energy producers and some oil support services.

**Commercial**

The total Commercial Clients loan portfolio of \$11.2 billion (2014 \$14.7 billion) is a small portfolio representing 3 per cent (2014 4 per cent) of total loans and advances. However, the impairment charge on this portfolio increased to \$599 million in 2015 from \$212 million in 2014 mainly due to increased impairments in India, China, Africa and Korea.

The Group has also revised its assumptions regarding recovery rates on impaired exposures downward leading to higher impairment. This is mainly based on recent recovery experience and more stressed market conditions.

**Liquidation portfolio**

As part of the announcement of the new strategic plan in November 2015, the Group identified \$7.9 billion of loans which were outside the Group's risk tolerance levels and plan to liquidate this portfolio. This included \$7.5 billion of gross non-performing which carries a provision of \$3.5 billion. \$968 million of this provision was taken for a small number of counterparties where the recovery was based on discounting revised cash flow projections based on expected sales values.

**Our response****Overview**

Corporate & Institutional Clients, Commercial Clients, Private Banking Clients and loans and advances to banks (collectively 'Larger Clients') represents 71 per cent (\$233 billion) of the Group's net loan exposure, while Retail Clients represent 29 per cent (\$95 billion). The Larger Client's exposure comprises larger loans that are monitored individually, based on the knowledge of each individual borrower. However, the Retail clients exposure comprises much smaller value loans to a much greater number of customers. Accordingly, loans are not monitored on an individual basis, but are grouped by product into homogeneous exposures. Exposures are then monitored through delinquency statistics, which also drive the assessment of loan loss provisions.

**Procedures performed**

Our audit procedures in all in-scope components included.

- For both Larger Clients and Retail Clients, our in-country teams used their local knowledge to assess the trends in their local credit environments and considered the likely impact on the Group's exposures to focus their testing on key risk areas.

**For Larger Clients, our procedures included**

-Testing the key controls over the credit grading and monitoring process, to assess if the risk grades allocated to counterparties were appropriate and loans were appropriately identified, on a timely basis, into early alert or credit grades 12 to 14

-Performing credit assessments of all loans with a carrying value above \$40 million in credit grades 12, 13 and 14 (see pages 172 and 173) and loans above \$75 million on the Group's Early Alert Report (see page 209) together with a selection of other loans selected by country teams based on local materiality levels For these selected loans, we assessed the reasonableness of the forecast of recoverable cash flows, realisation of collateral and other possible sources of repayment We compared key assumptions to progress against business plans and our own understanding of the relevant industries and business environments We also compared them, where possible, to externally derived evidence such as commodity prices, business performance and real estate valuations

-Substantive testing of a selection of credit grade one to 11 counterparties in each scoped component to test the appropriateness of the credit grade

For Retail Clients, the impairment process is based on projecting losses based on the prior historical payment performance of each client, adjusted for current market conditions

**Our procedures included**

-Testing the accuracy of the key inputs into the models

-For a selection of models, using our own valuation specialists to assess the appropriateness of the impairment calculation methodology and reviewing the results of the Group's validation of such models

-Where model adjustments were made to reflect recent loss experience and current market conditions, we assessed the appropriateness of such adjustments

**For portfolio impairment provision (PIP), our procedures included**

-Testing the key management controls over the input of underlying data into the models

-Using our modelling specialists to evaluate the methodology and the key assumptions used in determining the estimate for both the Retail Clients and the Larger Clients and wherever possible, we compared the key assumptions used to externally available industry, financial and economic data

-Assessing the appropriateness of the emergence period and management adjustments to the output from models for changes in economic factors and specific risks to the exposure

-Overall assessment and reasonableness of the PIP balance with respect to the qualitative and quantitative changes in the underlying loan portfolio

- For the key underlying systems used for the processing of transactions we involved our information technology specialists to test a selection of automated controls within these systems We also tested the key controls over these underlying systems, for example, controls over access to systems and data and change management

- Assessing whether the financial statement disclosures appropriately reflect the Group's exposure to credit risk

- Our additional procedures in the particular risk areas of the portfolio, i e India, Commodities, China and Commercial exposure included

-Reading management's own stress tests and risk-mitigation actions to identify areas of focus

-Extending our audit coverage over the stressed sectors and geographies and, in particular, to certain components within these portfolios, for example, infrastructure and telecoms in India as well as lower-rated oil producers within Commodities and related exposures In doing so, we focused on the grading of the counterparties, assessed the quality of the ongoing portfolio monitoring controls, the tenor of the debt and the rate at which counterparties were moving into early alert and credit grades 12 to 14

-Increasing the extent of Group audit team oversight over work done by the component team For example, the Senior Statutory Auditor visited Greater China and her delegate visited India

•For the liquidation portfolio, our additional procedures in respect of the impaired exposures involved assessing the key judgements, relating to recovery, namely the likely price and expected time to sell

*THIRD MOST OFTEN RANKED KAM IN THE DEPOSITORY INSTITUTIONS INDUSTRY: TAXATION AND REGULATION***Current and deferred tax**

Refer to Note 1.10. Income tax expense, Note 3.5. Deferred tax and Note 5.1. Basis of preparation and other accounting policies.

The manual processes and judgements involved increase the risk of misstatement and as such, we have considered current and deferred taxation to be an area of focus.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Group operates and generates taxable items. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. Management establish provisions where appropriate on the basis of amounts expected to be paid to tax authorities.

Deferred tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. This risk related to the recoverability of the deferred tax assets recognised.

The calculation of the current and deferred tax is produced manually and is based on a number of supporting complex calculations including share based payments, deferred bonuses, the spreading of initial charges and commissions.

**How our audit addressed the area of focus**

In assessing the current and deferred tax, we:

- Assessed whether management had reflected appropriately the changes in UK corporation tax in their current and deferred income tax calculations;
- Obtained and read tax working papers for the Group's material legal entities and obtained evidence in relation to positions taken;
- Obtained the deferred tax calculations and assessed the recoverability of the deferred tax assets. We evaluated whether the temporary difference will reverse in the future and whether there is sufficient taxable profit available against which the temporary difference can be utilised; and
- Tested whether the tax disclosures and presentation in the Annual Report complied with IAS 1 'Presentation of financial statements' and IAS 12 'Income taxes'.

We also evaluated whether the Group had met its compliance obligations for the material territories in which the Group operates, and as such we:

- Evaluated the tax reporting and compliance position of the Group including consideration of ongoing or new tax audits being undertaken by fiscal authorities in the UK; and
- Assessed the conclusions reached by management in relation to the current transfer pricing arrangements, worldwide debt cap, changes to the Group structure and controlled foreign companies' position.

Based on our work performed above, management's assumptions and judgements in respect of the Group's current and deferred tax positions are in line with available evidence. The tax disclosures presented within the financial statements are in line with IAS 1 and IAS 12.

*FOURTH MOST OFTEN RANKED KAM IN THE DEPOSITORY INSTITUTIONS INDUSTRY: PROVISIONS***Conduct risk and provisions**

Refer to page 72 (Audit Committee Report), page 186 (Accounting Policies) and page 230 (Note 38 and Critical Accounting Estimates and Judgements).

Significant provisions have been made in respect of conduct matters in recent years, reflecting customer redress payments, operational costs and regulatory fines.

The most significant provisions have related to past sales of payment protection insurance policies, arrears handling activities, packaged bank accounts and insurance products of the German branch of Clerical Medical Investment Group Ltd (now Scottish Widows Ltd).

Given the number and volume of products sold by the Group historically, and the continued regulatory and public focus on the banking industry, there is a continuing risk that new conduct issues will emerge. Therefore, there is a financial reporting risk that such emerging risks and exposures are not appropriately identified and provided for.

In relation to known issues, the measurement of provisions is highly judgemental and involves the use of several management assumptions including volume of future complaints and related redress costs.

Furthermore, there is a risk that these known and emerging issues are not appropriately disclosed in the financial statements.

**How our audit addressed the area of focus**

We understood and tested the key controls and management's processes for:

—identifying emerging conduct risk exposures and assessing whether provisions or disclosures were necessary; and

—the calculation and review of conduct provisions including governance processes and approvals of model assumptions and outputs.

We found these key controls were designed, implemented and operated effectively and therefore we determined that we could place reliance on these key controls for the purposes of our audit.

In addition we have performed the following substantive procedures:

We met with Divisional and Group management to understand the emerging and potential issues that they had identified. We independently assessed emerging and potential areas where exposures might have arisen based upon our knowledge and experience of emerging industry issues and the regulatory environment. We used this to challenge the completeness of the issues identified by management and whether a provision was required.

We understood customer complaints received, and assessed the trends. We used this analysis to understand whether there were indicators of more systemic issues being present for which provisions or disclosures may have needed to be made in the financial statements.

We read the Group's correspondence with the Financial Conduct Authority and Prudential Regulation Authority and discussed the output of any meetings held. We met on a trilateral basis with the Financial Conduct Authority, Prudential Regulation Authority and the Chair of the Audit Committee. We also met on a bilateral basis with each regulator. We read the minutes of key governance meetings including those of the Board, and of various management committees, as well as attending Audit Committee and Board Risk Committee meetings. We also understood the key activities of the Conduct and Compliance function.

The majority of our detailed audit work was on the significant conduct provisions in relation to past sales of payment protection insurance policies, arrears handling activities, packaged bank accounts and insurance products in the German branch of Clerical Medical Investment Group Ltd (now Scottish Widows Ltd). We also examined other areas of compensation payments made to customers.

For significant provisions made, we understood and challenged the provisioning methodologies and underlying assumptions used by management. For example, we challenged the basis that management used for forecasting the number of PPI complaints that will be received in the future. We also considered regulatory developments and management's interactions with regulators.

For those assumptions based on historic information, we challenged whether this was appropriate for future experience and challenged the appropriateness of any adjustments made by management. We also independently performed sensitivity analysis on the key assumptions.

Given the inherent uncertainty in the calculation of conduct provisions and their judgemental nature, we evaluated the disclosures made in the financial statements. In particular, we focused on challenging management that the disclosures were sufficiently clear in highlighting the exposures that remain, significant uncertainties that exist in respect of the provisions and the sensitivity of the provisions to changes in the underlying assumptions.



*FIFTH MOST OFTEN RANKED KAM IN THE DEPOSITORY INSTITUTIONS INDUSTRY: VALUATION OF NON-CURRENT ASSETS*

**Classification of seed capital investments (£207 million) Refer to pages 46 to 49 (Audit and Risk Committee report), pages 83 to 84 (accounting policy) and note 20 of the financial statements disclosures.**

The risk — the Group invests in funds that are managed by Group subsidiaries. If the Group is deemed to have control over the funds invested, they need to be consolidated into the Group's financial statements. When determining whether the Group controls the underlying funds, the strength of the linkage between the Group's power to influence the funds' operations and the variable returns received by the Group is one of the key judgmental areas that our audit is concentrated on, because there is a risk that management could incorrectly assess the strength of the linkage, leading to an incorrect decision on whether the seed capital investments should be consolidated.

In our audit report for the year ended 30 June 2014 we included the classification of seed capital investments as HFS investments as one of the risks of material misstatement that had the greatest effect on our audit. We considered this risk to be less significant in the current year as the Directors now have well established processes to assess the classification.

**Our responses** — we critically assessed the Directors' rationale for determining the linkage between the power and the variable returns for each seed capital investment. We assessed against the accounting standard the framework that the directors designed for identifying combinations of different levels of economic interests in funds and strength of other investors' rights to replace the Group entities as the investment manager, that constitute control. Since the accounting standard does not include preset levels for these combinations, we assessed the appropriateness of the Directors' threshold combinations by comparing it to the industry normal practice. We agreed the aggregate economic interest (including direct holdings, indirect holdings, management fees and performance fees where relevant) held by the Group to funds legal documents and independent confirmations from fund administrators. We also assessed the strength of other investors' rights by reference to the funds legal documents and agreeing the number of investors in each fund to the fund administrators' reports.

We also assessed whether the Group's disclosures on the classification of seed capital investment reflect the Group's involvement in each fund.

**Our findings** — we found that the Group's judgments made in determining these classifications were balanced, and that the disclosures on the basis of classification judgments are proportionate. We found no errors in the holdings above the materiality level over which we are required to report to the Audit and Risk Committee.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the depository institutions industry

KAM	Depository Institutions
Employee benefits	JUPITER FUND MANAGEMENT PLC
Goodwill	LONDON STOCK EXCH GROUP PLC
Internal controls	LONDON STOCK EXCH GROUP PLC
Financial instruments	STANDARD CHATERED PLC
Acquisitions	HENDERSON GROUP PLC
Valuation	INTERMEDIATE CAPITAL GROUP PLC
Other	BGEO GROUP PLC
IT	HSBC HLDGS PLC
Business combinations	HENDERSON GROUP PLC
Presentation and disclosure	ICAP PLC

### **SIC CODE 63-64 Insurance carriers**

Out of the 350 constituents of the FTSE 350, 17 are active as insurance carriers. Our dataset contains information about 13 of these companies. The insurance carrier industry is slightly smaller than the average industry as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

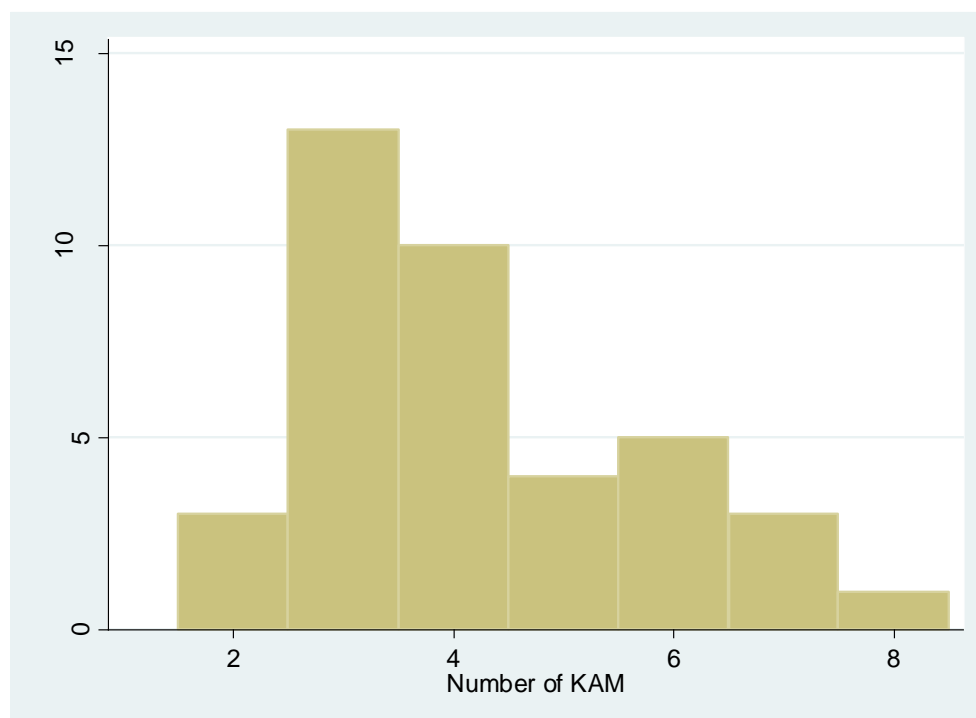
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	13	4.31	1.55	3	3	4	5	8
Number of KAM second year	13	4.23	1.48	2	3	4	5	7
Number of KAM third year	13	4.08	1.71	2	3	4	5	7
Number of KAM all years	39	4.21	1.54	2	3	4	5	8

**Table 1: The number of KAM of insurance carriers**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median of KAMs is constant over time. It should be noted that the variance is high (1.54), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAMs, some firms receive up to 8 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 3. This might come across as a surprise since the median is 4 and the average amount of KAMs exceeds 4.



**Figure 1: Histogram of the number of KAM of insurance carriers over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	13	912	517.67	179	620	973	1093	2222
Length second year	13	1383	494.15	799	1058	1193	1628	2301
Length third year	13	1522	506.84	764	1043	1642	1883	2291
Length all years	39	1272	559.29	179	959	1113	1670	2301

**Table 2: Descriptive statistics of the length of the KAM section of insurance carriers**

Table 2 shows that the number of words of the KAM section equals on average 1272 (median value of 1113 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 179 words and 2301 words).

Although the number of KAM remains constant, the length shows a strong increase over the three years. Table 2 shows that the average length of the KAM section increases every year. Given the number of KAM is decreasing over time (see Table 1), this illustrates that the average length of a KAM discussed in the insurance carrier industry increases from 212 in the first year to an average of 373 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 8, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the insurance carrier industry discloses 4 KAMs (i.e. 164 KAMS in total for the 39 firm year observations) with an average length of 1272 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is valuation of non-current assets (17.68%) followed by valuation (16.46%), provisions (14.63%) and taxation and regulation (11.59%). The category ‘Other’ includes KAM such as acquisitions, presentation and disclosure, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of the valuation of non-current assets (from 16.07% to 18.87%), the valuation (from 14.29% to 20.75%) and the provisions (from 10.71% to 15.09%) KAMs increase, while the occurrence of taxation and regulation decreases (from 12.50% to 9.43%).

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number remains constant, the content of the KAM discussion section changes over time with more emphasis on valuation of non-current assets, valuation and provisions and less emphasis on taxation and regulation.

	KAM	First year	Second year	Third year	All years
Most disclosed	Valuation of non-current assets	16.07%	18.18%	18.87%	17.68%
Second most disclosed	Valuation	14.29%	14.55%	20.75%	16.46%
Third most disclosed	Provisions	10.71%	18.18%	15.09%	14.63%
Fourth most disclosed	Taxation and regulation	12.50%	12.73%	9.43%	11.59%
Fifth most disclosed	Other	46.43%	36.36%	35.86%	39.46%

**Table 3: Type of KAM most often disclosed with insurance carriers**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eighth KAM
Valuation of non-current assets	6.90%	31.03%	24.14%	6.90%	17.24%	6.90%	6.90%	0.00%
Valuation	59.26%	14.81%	0.00%	18.52%	3.70%	3.70%	0.00%	0.00%
Provisions	20.83%	16.67%	41.67%	12.50%	8.33%	0.00%	0.00%	0.00%
Taxation and regulation	42.11%	26.32%	5.26%	21.05%	5.26%	0.00%	0.00%	0.00%
Other	12.31%	26.15%	27.69%	12.85%	6.15%	9.23%	3.08%	1.54%

**Table 4: Sequence of the five KAMs most often discussed with insurance carriers**

Valuation is the KAM second most often mentioned in the audit report (see Table 3) but, if mentioned, it most often appears first in the KAM section. Similarly, although valuation of non-current assets is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second or third KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (69.23%), while 15.38% uses equity and another 15.38% uses other measures as a way to determine materiality. The category other includes bases to determine the applied level of materiality which were not classifiable in a certain group.

Looking at the materiality level used, Q1 shows that the materiality level most often applied for the insurance carrier industry is 5% or higher with a maximum of 10%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	27	69.23	5.23	1.40	1	5	5	5.2	10
2	Equity	6	15.38	2.28	0.50	1.7	1.9	2.2	2.7	3
3	Other	6	15.38	0.77	0.26	0.5	0.5	0.5	1	1

**Table 5: The applied materiality level with insurance carriers**

### 3) Summary of the main findings in insurance carriers

In the insurance carriers industry the median number of KAM mentioned is 4 with an average length of 303 words per KAM. While the number of KAM remains constant over the three years studied, the content of the KAM section changes with more emphasis on valuation and provisions and less emphasis on taxation and regulation. Valuation is the KAM second most often mentioned and, if mentioned, it appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that insurance carriers is an industry with a similar amount of KAMs mentioned as the whole sample. Although revenue recognition is not present in the top 4 of most often mentioned KAMs, its roll remains important as it constitutes 9.15% of the total KAMs.

	Insurance carriers	Total sample
Number of KAM (median)	4	4
Length per KAM	303	305
Most common type	<ol style="list-style-type: none"> <li>1. Valuation of non-current assets</li> <li>2. Valuation</li> <li>3. Provisions</li> <li>4. Taxation &amp; Regulation</li> <li>5. Revenue recognition</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation &amp; regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in insurance carriers**

## Appendix 1: Frequency table of the KAMs disclosed with insurance carriers

KAM	Frequency	Percentage
Valuation of non-current assets	29	17.68
Valuation	27	16.46
Provisions	24	14.63
Taxation and regulation	19	11.59
Revenue recognition	15	9.15
Goodwill	12	7.32
Internal controls	10	6.10
Other	8	4.88
Valuation of current assets	7	4.27
Acquisitions	4	2.44
Employee benefits	3	1.83
IT	3	1.83
Presentation and disclosure	1	0.61
Business combination	1	0.61
Financial instruments	1	0.61
Total	164	100

**Table 7: Frequency table of the different types of KAM (three year period) of insurance carriers**

**Appendix 2: Example of the longest KAM with insurance carries**

Esure group plc (2015 – Valuation of current assets, 996 words)

**Claims outstanding £614.2m (2014: £597.3m) and claims outstanding recoverable from reinsurers £209.3m (2014: £194.4m).**

Refer to page 36 (Audit Committee Report), page 76 (accounting policy) and pages 97 to 101 (financial disclosures).

**The risks**

As part of its business model the Group incurs insurance claims and there is typically a time lag between a claim being incurred and being settled. As a result, the Group has significant claims outstanding at any point in time, including the year-end, and there is inherent uncertainty as to the level at which these claims outstanding will be settled.

At 31 December 2015 the Group had claims outstanding representing 56% (2014: 57%) of total liabilities, and claims outstanding recoverable from reinsurers representing 14% (2014: 15%) of total assets.

**Gross claims outstanding:**

The valuation of claims outstanding is one of the key judgemental areas upon which our audit is concentrated, due to the level of subjectivity inherent in the estimation of the effect of uncertain or unknown future events and

the resulting potential exposure to large losses. This includes losses arising from periodic payment orders ('PPOs') for motor Insurance (a structured settlement in the form of a regular series of payments over the remainder of a claimant's life and which inherently has considerable uncertainty associated with it in respect of longevity and cost inflation, see page 97) and extreme weather condition losses for home insurance.

he determination of claims outstanding is complex. This balance consists of specific claims reserves for reported claims in addition to an estimate for claims incurred but not reported, as some claims can take some time to emerge or develop. Actuarial techniques are required to determine the actuarial best estimate and thus deduce the IBNR by deducting claims already reported. The completeness and accuracy of the data underlying the actuarial projections is a key area of focus as well.

The Directors apply their judgement, supported by quantitative and qualitative analysis to inform their views, to set the claims outstanding reserves at a level that they consider to be appropriate by Including a margin over the actuarial best estimate, in order to take account of current uncertainties around factors that may Influence the eventual settlement of the claims.

**Claims outstanding recoverable from reinsurers:**

The valuation of claims outstanding recoverable from reinsurers Is dependent on, but not directly correlated to, the valuation of the underlying claims outstanding. In particular, there is judgement involved in ascertaining the level of reinsurance IBNR held, which depends on the specific terms of the reinsurance contracts in place. Additionally, reinsurance recoveries are also subject to credit risk associated with reinsurer credit default. Credit risk is particularly relevant for the recoveries associated with the claims outstanding that have a long duration.



**Our response**

## Gross claims outstanding:

- Our audit procedures included testing governance arrangements and key controls around the internal reserving process, including controls over the setting of reserves for reported claims and controls over the completeness and accuracy of the data underlying the actuarial projections used to set the reserve for IBNR.
- We evaluated the competence, capabilities and objectivity of the internal and external actuaries used by the Group, based on discussions with them, our knowledge of the actuaries' qualifications and the professional standards that their work is subject to, and by providing challenge to their analysis through the procedures described below.
- We used our own actuarial specialists to assist us in our challenge of the reserving methodology and the key assumptions used (including the discount rate and longevity assumptions used for PPOs as well as considerations of the potential impact of large weather losses during the period). We have assessed these assumptions for reasonableness, through analytical procedures including claims development trends over time, as well as consistency with prior periods. We considered the movement in reserves relating to claims incurred in prior years to assess the reasonableness of Directors' past assumptions and the methodology used to estimate claims outstanding. Where there have been changes in the methodology or key assumptions we have assessed whether these are reasonable based on changes in the industry and the Group's historical claims experience, and have considered whether all changes we would expect to see have been made. We have also considered the reasonableness of the differences in methodologies, assumptions and projections between the internal and external actuary by understanding the rationale for both approaches and comparing the impact of these differences on the outputs in the context of materiality for the Group financial statements.
- We benchmarked the Group's methodology, key assumptions and projected results (such as the ultimate loss ratios) against our expectations given our cumulative knowledge of the sector.
- In respect of the margin that the Directors have set over the Internal actuarial best estimate, we considered the consistency of the margin applied against developments in the level of uncertainty over the claims. This also included critical assessment of the quantitative and qualitative considerations made by the Directors when selecting the specific level of margin to be held for the period as well as consideration of industry related benchmarks.
- We have also considered the adequacy of the Group's disclosures over the degree of estimation uncertainty and the sensitivity of recognised amounts to changes in assumptions, and assessed whether the disclosures comply with relevant accounting standards.

## Claims outstanding recoverable from reinsurers:

- We evaluated and tested key controls around reinsurers' share of claims outstanding, including the governance process in determining reinsurance IBNR and reinsurance credit controls.
- We used our own actuarial specialists to assist in evaluating the appropriateness of reinsurance recoveries on IBNR by considering the historical ratios of 'paid and reported claims, net of reinsurance recoveries' to 'paid and reported claims, gross of reinsurance recoveries.'
- We assessed the methodology applied to calculate the allowance for reinsurance bad debt, by reference to common approaches within the market and consistency with prior periods. We assessed the existence of any potential indicators of credit default issues with regard to reinsurance over reported claims through analysing aged debt and reinsurance counterparty credit ratings.

**Appendix 3: Longest KAMs of the five most common KAMs with insurance carriers***FIRST RANKED KAM IF INSURANCE CARRIERS: VALUATION OF NON-CURRENT ASSETS***Valuation and impairment of intangible assets**

At 31 December 2015 the group had £496.2m of goodwill and £104.3m of intangible assets (comprising computer software and capitalised employment contracts) and management determined there to be considerable headroom of the recoverable amount above the net asset value for the majority of the Group's Cash Generating Units ('CGU'), resulting in no impairment.

See significant accounting policies section within the financial statements for the disclosures of the related accounting policies, judgements and estimates and notes 11 and 12 for detailed intangibles disclosures.

We focused on this area because the determination of whether or not certain elements of goodwill and intangible assets were impaired involves complex and subjective judgements by the Directors about the future results of the relevant parts of the business. Management calculates the recoverable amount by using a value in use ("VIU") discounted cash flow model underpinned by key assumptions which are the terminal growth rates and weighted average cost of capital ("WACC") by CGU.

There has been and continues to be significant software capitalisation in the UK Employee Benefits business, its bespoke benefits management system. The UK EB business has experienced challenges during the year in its underlying performance. As a result we focused our work on the valuation and potential impairment of goodwill and software intangibles in this business.

**How our audit addressed the area of focus**

- We evaluated the results of management's "impairment assessment, including an assessment of the appropriateness of the methodology used to perform this and performed substantive testing of all inputs into their valuation such as agreeing to approved budgets and checking historical performance against the budget.
- We considered the appropriateness of the key assumptions within management's valuation as follows:
  - terminal growth rates in the forecasts by comparing them to economic and industry forecasts; and
  - WACC by assessing the cost of capital for the company and comparable organisations.
- We performed sensitivity analysis around the key assumptions above to ascertain the extent of change in those assumptions that either individually or collectively would be required for goodwill to be impaired.
- For computer software intangibles we performed substantive testing to check the amount that has been capitalised is directly associated with the production of identifiable and unique software products that will generate economic benefits exceeding costs beyond one year. Specifically for the Employee Benefits bespoke system, we obtained the model and assessed the assumptions to identify if these were realistic based on the business plan and through a scenario based sensitivity analysis.
- For capitalised employment contracts we performed substantive testing over a sample of contracts to ensure there were relevant performance conditions to allow the capitalisation of the contracts.

As a result of this and our other testing we determined that the impairment assessment performed is reasonable based on the current business plans and historical performance for both goodwill and significant intangible items.

*SECOND MOST RANKED KAM OF INSURANCE CARRIERS: VALUATION***Determination of actuarial assumptions for valuation of assets and liabilities**

Refer to page 68 (Audit Committee report), page 117 (Critical accounting estimates and judgements), pages 164 to 171 (Accounting policies and notes).

The Directors' determination of assumptions for the valuation of life insurance contract liabilities involves complex judgements about future events, both internal and external to the business. Changes in assumptions can result in material impacts to the valuation of the liabilities. The methodology used can also have a material impact on the valuation of the insurance contract liabilities.

As part of our consideration of assumptions, we gave specific focus to the annuitant mortality assumptions used in valuing life insurance contract liabilities, given the sensitivity of the Group's profit to changes in these assumptions and the level of judgement involved in setting these assumptions.

Annuitant mortality assumptions are those related to the life expectancy of annuitants and the rate at which expectancy is likely to increase. These assumptions are driven by past experience and assumptions about future changes which are based on the Group's experience, together with industry standard data tables.

Due to the magnitude of the balance and the estimates involved in the valuation, we also considered the assumptions used in valuing pension scheme liabilities. This included assumptions over mortality, discount and inflation rates.

Due to a regulatory change in Hong Kong, which had a material impact on the valuation of the deferred acquisition costs of Standard Life's Hong Kong insurance business, we focused on the assumptions used in this valuation.

**Our audit work in respect of actuarial assumptions in respect of life insurance contract liabilities included:**

-Assessing the key changes in the assumptions against regulatory and reporting requirements and industry standards.

-Obtaining audit evidence in respect of the key controls over the key actuarial models, data collection and analysis and the assumptions setting processes used by management, evaluating their design and implementation and testing their operating effectiveness.

-Benchmarking management's assumptions in the UK against over 25 of the largest life insurers in the UK which were included in PwC's independent benchmarking survey. This allowed us to compare the assumptions used relative to those used by the Group's industry peers.

**Specifically for annuitant mortality assumptions:**

-Evaluating the choice of the industry standard Continuous Mortality Investigation ('CMI') model against the outputs of management's internal cause of death model, wider market data from benchmarking and regulatory feedback.

**Our audit work in respect of methodologies used in the valuation of life insurance contract liabilities included:**

-Challenging management's methodology, focusing on changes to methodology in the year, by applying our industry knowledge and experience to compare whether the methodology and / or changes are in compliance with recognised actuarial practices and regulatory and reporting requirements.

**Our audit work in respect of actuarial assumptions in respect of pension scheme liabilities included:**

-Testing management's discount rate by creating an independent discount rate expectation based on our knowledge of the Standard Life pension scheme and other schemes of a similar nature

-Benchmarking management's key assumptions (pensioner and non-pensioner mortality, spread between RPI and CPI and inflation rate premium) against over 50 companies which were included in PwC's independent benchmarking survey. This allowed us to compare the assumptions used relative to those used by other companies.

We determined based on our audit work that the assumptions used are in line with financial reporting requirements and industry accepted practice and reflect the nature of the value of the Group's pension scheme.

**Our audit work in respect of the valuation of the deferred acquisition costs of Standard Life's Hong Kong insurance business included:**

-Challenging management's assumptions by applying our industry knowledge and experience to compare whether the assumptions are in time with industry accepted practice and relevant regulatory and reporting requirements.

We determined that the assumptions used in the valuation appropriately reflected the change in circumstances.

*THIRD MOST OFTEN RANKED KAM OF INSURANCE CARRIERS: PROVISIONS***Completeness and valuation of litigation provisions**

The litigation provision as at 31 December 2015 is £18.2 million (2014: £5.6 million)..

See significant accounting policies section within the financial statements for the disclosures of the related accounting policies, judgements and estimates and note 23 for detailed provision disclosures.

We focused on this area because of the inherent uncertainty that surrounds litigation provisions in relation to potential and actual claims where clients or third parties believe there has been fault in the services provided and consequently the judgemental nature in estimating the level of provision required.

**How our audit addressed the area of focus**

- We assessed the Directors' process for the identification and evaluation of provisions for the Group's potential and outstanding litigation.
- We obtained a list of external legal counsels that are used by JLT and sent a sample of confirmations to these parties to identify any unknown litigations.
- We reviewed the legal costs to check the completeness of this list and understand if there was litigation we were not aware of through management's process.
- We reviewed the adequacy of the disclosures and the provisions by considering the status of the known and potential claims back to appropriate documents. We understood the underlying assumptions, rationale and sensitivities having regard to the potential for bias.

As a result of this we determined that the overall provision is appropriate. Management has provided for the costs on the basis of the most recent information. The nature of the provisions, being determined on an assessment of legal outcomes, means any final settlement is subject to significant uncertainty. The results could differ, possibly materially, from the amounts provided.

*FOURTH MOST OFTEN RANKED KAM OF INSURANCE CARRIERS: TAXATION AND REGULATION***Insurance liabilities (provision for losses and loss adjustment expenses) £12,191 million (2014 £13,266 million)**

Refer to page 61 (Group Audit Committee Report) page 109 (accounting policy) and pages 155 to 160 (financial disclosures)

insurance liabilities represent the single largest liability for the Group Valuation of these liabilities is highly judgemental and requires

a number of assumptions to be made that have high estimation uncertainty This is particularly the case for those liabilities that are recognised in respect of claims that have occurred but have not yet been reported to the Group.

Certain lines of business also contain greater inherent uncertainty for example those where claims emerge more slowly over time or where there is greater variability in claim settlement amounts This includes Abuse Asbestos and Deafness classes UK Professional and Financial Risk Classes the Danish Workers Compensation class the Swedish Personal Accident classes the Canadian General Liability classes and classes of business affected by emerging industry issues such as the impact of Periodic Payment Orders (which are akin to annuities with longevity and inflation risk) on UK motor business.

Small changes in the assumptions used to value the liabilities particularly those relating to the amount and timing of future claims can lead to material impacts on the valuation of insurance liabilities The key assumptions that drive the reserving calculations include loss ratios, estimates of the frequency and severity of claims and where appropriate the discount rates for longer tail classes of business by territory and line of business

The valuation of insurance liabilities depends on accurate data about the volume amount and pattern of current and historical claims since they are often used to form expectations about future claims if the data used in calculating insurance liabilities or for forming judgements over key assumptions is not complete and accurate then material impacts on the valuation of insurance liabilities may arise.

Finally a margin is added to the actuarial best estimate of insurance liabilities to provide for the risk of adverse development in the claims recognised The appropriate margin to recognise is a judgement taken by management, based on the perceived uncertainty and potential for volatility in the underlying claims As such, it is a subjective estimate.

As a result of all of the above factors insurance liabilities represent a significant risk for the Group

**Response**

Our audit procedures included

-The evaluation and testing of key controls around the claims handling and case reserve setting processes of the Group. We examined evidence of the operation of controls over the

-Valuation of individual claims reserves such as large loss review controls and internal peer reviews (whereby second reviewers examine documentation supporting claims case reserves and consider if the amount recorded in the financial statements is valued appropriately)

-Checking samples of claims case reserves through comparing the estimated amount of the case reserve to appropriate documentation such as reports from loss adjusters

-The evaluation and testing of key controls designed to ensure the integrity of the data used in the actuarial reserving process (including both current and prior year case reserve data)

-Re-performing reconciliations between the claims data recorded in the policy administration systems and the data used in the actuarial reserving calculations

In addition, with the assistance of our actuarial specialists we assessed the key assumptions and reserving methodologies driving the value of the insurance liabilities.

To do this we:

- compared the assumptions to expectations based on the Group's historical experience, current trends and our own industry knowledge including information relating to forthcoming legislation that may impact claims settlement speed or amount.

- evaluated the level of prudence applied and compared this to prior periods

- used our industry knowledge to benchmark the Group's reserving methodologies assumptions and estimates of losses and

- reviewed sensitivity analyses over key judgements and assumptions, such as the discount rates for longer tail classes of business and Periodic Payment Order projections

- Independently re-projected the reserve balances for certain classes of business

- Evaluated the governance around the overall Group reserving process including the scrutiny applied by the Local Regional and Group Reserving committees as well as Group level actuarial reviews. We assessed qualifications and experience of those responsible and examined the output of the reviews to assess the scope and depth of these processes. Our evaluation of the methodologies and key assumptions for the most significant and subjective classes of business enabled us to assess the quality of the challenge applied through the Group's reserving process. This included evaluating the appropriateness of the Reserve committees determination of the appropriate margin to be applied to the actuarial best estimate of insurance liabilities. In particular we considered the allowance for uncertainties inherent in the data and assumptions inherent in developing the actuarial best estimate.

- Finally we also assessed the Group's disclosure in relation to insurance liabilities including the discount rate and historic claims development

*FIFTH MOST OFTEN RANKED KAM OF INSURANCE CARRIERS: REVENUE RECOGNITION***Complex and judgemental areas of revenue recognition**

See significant accounting policies. section within the financial statements for the disclosures of the related accounting policies, judgements and estimates.

Revenue is the largest balance in the group financial statements. The Group has a number of revenue streams within which the timing and extent of revenue recognition is more complex or judgemental. For example, revenue streams with ongoing performance conditions, long term revenue streams which generate significant accrued income balances and third party revenue sharing arrangements which create the potential for incorrect calculation of revenue. Our audit covers the completeness, cut-off, occurrence and accuracy assertions.

We also look at revenue streams where the processing is manual rather than system-driven and as a result is more at risk of misstatement due to fraud or error.

**How our audit addressed the area of focus**

- We updated our understanding of the key internal controls over the revenue streams and tested the relevant controls in place to obtain comfort over the cut off, occurrence and accuracy of revenue around the Group.
- We tested the timing of revenue recognition and whether the Group appropriately recorded revenue taking into account contractual terms and performance obligations to customers by enquiry and detailed sample testing.
- We tested a sample of revenue transactions (using substantive and data auditing techniques back to contracts) and performed substantive testing over accrued and deferred revenue including evaluating the appropriateness of the key assumptions by considering the accuracy of prior year estimates against the current year realisation which did not identify unusual or irregular items.
- We obtained unusual or complex arrangements around the Group, such as third party pay away arrangements and assessed them to ensure there is appropriate revenue recognition in line with the Group accounting policy, IFRS and the terms of the contract. This is particularly prevalent in the Asian business.

Revenue recognition on judgemental, complex or unusual transactions is Consistent with the Group accounting policy, IFRS and supporting documents.



Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM with insurance carriers

KAM	Insurance carriers
Goodwill	LANCASHIRE HLDGS
Internal controls	STANDARD LIFE PLC
Other	DIRECT LINE INSURANCE GRP
Valuation of current assets	ESURE GROUP PLC (2)
IT	PHOENIX GROUP HLDGS
Employee benefits	RSA INSURANCE GROUP PLC
Acquisitions	PRUDENTIAL PLC
Financial instruments	STANDARD LIFE PLC

### **SIC CODE 65 Real estate**

Out of the 350 constituents of the FTSE 350, 10 are active in the real estate industry. Our dataset contains information about 7 of these companies. The real estate industry is smaller than the average industry as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

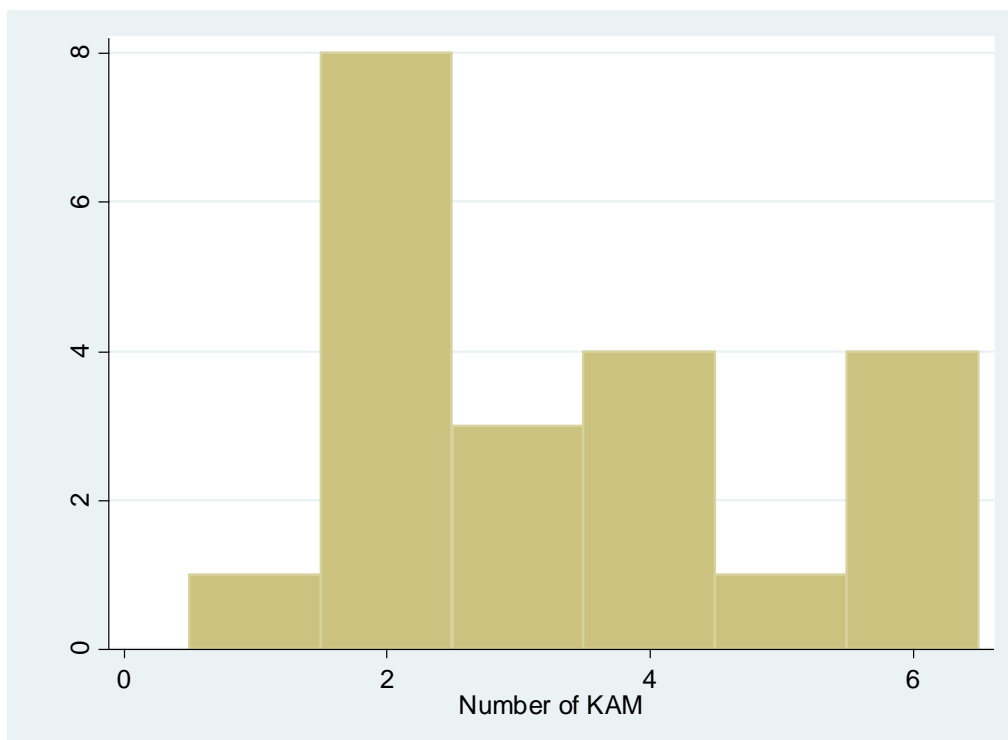
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	7	3.57	1.40	2	2	4	4	6
Number of KAM second year	7	3.57	1.81	2	2	3	6	6
Number of KAM third year	7	3.00	1.83	1	2	2	5	6
Number of KAM all years	21	3.38	1.63	1	2	3	4	6

**Table 1: The number of KAM in the real estate industry**

Looking at the total sample period of 3 years we observe that the median number of KAM equals 3. The median of KAMs is not constant over time and decreases every year. It should be noted that the variance is high (1.63), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive up to 6 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 2. It should be noted that although the median amount of KAMs equals 3, not a lot of firms do receive 3 KAMs.



**Figure 1: Histogram of the number of KAM in the real estate industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	7	664	147.78	370	612	688	790	808
Length second year	7	1305	665.04	732	874	969	1824	2571
Length third year	7	1258	683.34	642	649	1070	2055	2363
Length all years	21	1076	607.15	370	688	872	1154	2571

**Table 2: Descriptive statistics of the length of the KAM section in the real estate industry**

Table 2 shows that the number of words of the KAM section equals on average 1076 words (median value of 872 words) using the three years as the sample period. We also observe a high variance between the minimum and the maximum value of the KAM length (between 370 words and 2571 words).

Although the number of KAM decreases, the length shows a strong increase over the three years. Table 2 shows that the average length of the KAM section increases from the first to the second year and decreases slightly from the second to the third year. Given the number of KAM is decreasing over time (see Table 1), this illustrates that the average length of a KAM discussed in the real estate industry increases from 186 in the first year to an average of 419 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 6, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the real estate industry discloses 3 KAMs (i.e. 71 KAMS in total for the 21 firm year observations) with an average length of 1076 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is valuation of non-current assets (23.94%) followed by taxation and regulation (18.31%), revenue recognition (16.90%) and valuation of current assets (8.45%). The category 'Other' includes KAM such as acquisitions, provisions, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a valuation of non-current assets (from 24.00% to 28.57%), valuation of current assets (from 16.00% to 19.05%) and taxation and regulation (from 4.00% to 14.29%) KAM increases over time, while the occurrence of revenue recognition decreases (from 20% to 14.29%).

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM decreases, the content of the KAM discussion section changes over time with more emphasis on valuation of current and non-current assets, taxation and regulation and less emphasis on revenue recognition.

	KAM	First year	Second year	Third year	All years
Most disclosed	Valuation of non-current assets	24.00%	20.00%	28.57%	23.94%
Second most disclosed	Taxation and regulation	16.00%	20.00%	19.05%	18.31%
Third most disclosed	Revenue recognition	20.00%	16.00%	14.29%	16.90%
Fourth most disclosed	Valuation of current assets	4.00%	8.00%	14.29%	8.45%
Fifth most disclosed	Other	36.00%	36.00%	23.8%	32.4%

**Table 3: Type of KAM most often disclosed in the real estate industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam
Valuation of non-current assets	88.24%	5.88%	5.88%	0.00%	0.00%	0.00%
Taxation and regulation	0.00%	46.15%	15.38%	23.08%	0.00%	15.38%
Revenue recognition	25.00%	8.33%	25.00%	16.67%	8.33%	16.67%
Valuation of current assets	0.00%	66.67%	0.00%	0.00%	33.33%	0.00%
Other	13.04%	34.78%	26.09%	17.39%	8.70%	0.00%

**Table 4: Sequence of the five KAMs most often discussed in the real estate industry**

Valuation of non-current assets is the most important KAM discussed in the KAM section (see Table 3) and, if mentioned, it most often appears first in the KAM section. Similarly, taxation and regulation is the second most often mentioned KAM and, if mentioned, will most likely occur as the second KAM in the report (see Table 3). Finally, important to note is that revenue recognition also appears as fifth or sixth KAM in the KAM section, which probably indicates that they are added to be complete (probably also explained by the ISA standards).

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. Table 5 shows that profit before tax is the measure most often used (42.86%). The table also shows that 28.57% uses total assets and 14.29% uses net assets and equity as a base.

Looking at the materiality level used, Q1 shows that the materiality most often used in the real estate industry equals 5%.

	Base	obs	Frequency of the base	Materiality level used						
				(%)	Mean	Std. Dev.	Min.	Q1	Q2	Q3
1	Profit before tax	9	42.86	4.98	0.12	4.75	5	5	5	5.2
2	Total assets	6	28.57	0.78	0.25	0.5	0.5	0.85	1	1
3	Net assets	3	14.29	2	0	2	2	2	2	2
4	Equity	3	14.29	1	0	1	1	1	1	1

**Table 5: The applied materiality level in the real estate industry**

### **3) Summary of the main findings in the real estate industry**

In the real estate industry the median number of KAM mentioned is 3 with an average length of 319 words per KAM. While the number of KAM decreases over the three years studied, the content of the KAM section changes with more emphasis on valuation of non-current assets and taxation and regulation and less emphasis on revenue recognition. Valuation of non-current assets is the most

important KAM and, if mentioned, it appears first in the KAM section. This can definitely be explained by the characteristics of the industry. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that real estate is an industry with an amount of KAMs lower than the whole sample.

	Real estate	Total sample
Number of KAM (median)	3	4
Length per KAM	319	305
Most common type	<ol style="list-style-type: none"> <li>1. Valuation of non-current assets</li> <li>2. Taxation &amp; regulation</li> <li>3. Revenue recognition</li> <li>4. Valuation of current assets</li> <li>5. Acquisitions</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation &amp; regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in the real estate industry**

## Appendix 1: Frequency table of the KAMs disclosed in the real estate industry

KAM	Frequency	Percentage
Valuation of non-current assets	17	23.94
Taxation and regulation	13	18.31
Revenue recognition	12	16.90
Valuation of current-assets	6	8.45
Acquisitions	5	7.04
Other	4	5.63
Provisions	3	4.23
Goodwill	3	4.23
Internal controls	3	4.23
Financial instruments	2	4.23
Business combination	1	1.41
Valuation	1	1.41
Presentation and disclosure	1	1.41
Total	71	100

**Table 7: Frequency table of the different types of KAM (three year period) in the real estate industry**

**Appendix 2: Example of the longest KAM in the real estate industry**

Capital & Counties Properties plc (2015 – Valuation of non-current assets, 669 words)

**Area of focus: Valuation of investment and development properties**

Refer to pages 62 to 64 (Audit Committee Report), pages 102 to 106 (Principal Accounting Policies) and pages 102 to 142 (Notes to the accounts)

The valuation of the Group's investment and development properties is the key component of the net asset value and underpins the Group's result for the year. The result of the revaluation this year was a gain of £454m (2014 2454m), which is accounted for within 'Gain on revaluation and sale of investment and development property' and is a significant component of total consolidated income. The Group's property portfolios, which comprise investment property (including, retail, restaurants, offices, exhibition and residential) and development property located in central London are not uniform in nature, and therefore a number of different assumptions are made by the Group's external valuers in determining fair value.

- Investment properties — The valuation of investment properties (principally Covent Garden) is inherently subjective, due principally to the individual nature of each property (including its location) which heavily influences the future rental it is expected to generate. The assumptions on which the property values are based are influenced by tenure and tenancy details for each property, prevailing market yields and comparable market transactions.

- Development properties — The valuation of development property is also inherently subjective. Development properties (principally Earls Court), are valued using the residual appraisal method (i.e. by estimating the fair value of the completed project using either a sales comparison or income capitalisation method less estimated costs to completion and market based profit margin providing a return on development risk).

The valuations were carried out by third party valuers, Jones Lang LaSalle and CB Richard Ellis (the 'Valuers'). They were engaged by the Directors, in accordance with the RICS Valuation — Professional Standards ("RIM"). The Valuers used by the Group are well-known firms, with considerable experience of the Group's market.

The fact that only a small percentage difference in individual property valuations, when aggregated, could result in a material misstatement, warrants specific audit focus on this area.

**How our audit addressed the area of focus***Experience of Valuers and relevance of their work*

We read the Valuers' reports from CB Richard Ellis and Jones Lang LaSalle, who between them, value the entire property portfolio. We confirmed that the approaches used were consistent with RICS and the requirements of IRIS. We assessed the Valuers' competence and capabilities and read their terms of engagement with the Group, determining that there were no matters that affected their independence and objectivity or imposed scope limitations upon them.

*Data provided to the Valuers*

For investment and development properties we sample tested data provided to the Valuers by management and found that it was accurate and reliable. This data included tenancy schedules, capital expenditure details, cost schedules and square footage details which we agreed back to appropriate supporting documentation. For development properties we agreed that the planned schemes being valued were consistent with the actual planned developments and, where appropriate, had achieved planning consents.

*Assumptions and estimates used by the Valuers*

We met with the Valuers independently of management and challenged the valuation methods and assumptions used. The nature of assumptions used varied across the portfolio depending on the nature of each property but they included estimated capitol values, investment yields, construction costs and developers' margins. In each of these areas, and on a sample basis, we compared the estimates and assumptions used by the Valuers against our own expectations, using evidence of comparable market transactions. Where we identified estimates and assumptions that were outside the typical ranges used, we discussed these with the Valuers to understand the rationale and then assessed, based on all the available evidence and our experience in this sector, whether the use of the estimate or assumption was justified.

Our testing which involved the use of our internal real estate valuation specialists, qualified chartered surveyors with deep market knowledge, indicated that the estimates and assumptions used were appropriate in the context of the Group's property portfolios.



**Appendix 3: Longest KAMs of the five most common KAMs in the real estate industry****FIRST RANKED KAM IN THE REAL ESTATE INDUSTRY: VALUATION OF NON-CURRENT ASSETS****Valuation of investment and development properties**

Refer to pages 62 to 64 (Audit Committee Report), pages 102 to 106 (Principal Accounting Policies) and pages 102 to 142 (Notes to the accounts)

The valuation of the Group's investment and development properties is the key component of the net asset value and underpins the Group's result for the year. The result of the revaluation this year was a gain

of £454m (2014: 2454m), which is accounted for within 'Gain on revaluation and sale of investment and development property' and is a significant component of total consolidated income. The Group's property portfolios, which comprise investment property (including retail, restaurants, offices, exhibition and residential) and development property located in central London are not uniform in nature, and therefore a number of different assumptions are made by the Group's external valuers in determining fair value.

—Investment properties — The valuation of investment properties (principally Covent Garden) is inherently subjective, due principally to the individual nature of each property (including its location) which heavily influences the future rental it is expected to generate. The assumptions on which the property values are based are influenced by tenure and tenancy details for each property, prevailing market yields and comparable market transactions.

—Development properties — The valuation of development property is also inherently subjective. Development properties (principally Earls Court), are valued using the residual appraisal method (i.e. by estimating the fair value of the completed project using either a sales comparison or income capitalisation method less estimated costs to completion and market based profit margin providing a return on development risk).

The valuations were carried out by third party valuers, Jones Lang LaSalle and CB Richard Ellis (the 'Valuers'). They were engaged by the Directors, in accordance with the RICS Valuation — Professional Standards ("RIMS"). The Valuers used by the Group are well-known firms, with considerable experience of the Group's market.

The fact that only a small percentage difference in individual property valuations, when aggregated, could result in a material misstatement, warrants specific audit focus on this area.

**How our audit addressed the area of focus****Experience of Valuers and relevance of their work**

We read the Valuers' reports from CB Richard Ellis and Jones Lang LaSalle, who between them, value the entire property portfolio. We confirmed that the approaches used were consistent with RICS and the requirements of IFRS. We assessed the Valuers' competence and capabilities and read their terms of engagement with the Group, determining that there were no matters that affected their independence and objectivity or imposed scope limitations upon them.

**Data provided to the Valuers**

For investment and development properties we sample tested data provided to the Valuers by management and found that it was accurate and reliable. This data included tenancy schedules, capital expenditure details, cost schedules and square footage details which we agreed back to appropriate supporting documentation. For development properties we agreed that the planned schemes being valued were consistent with the actual planned developments and, where appropriate, had achieved planning consents.

**Assumptions and estimates used by the Valuers**

We met with the Valuers independently of management and challenged the valuation methods and assumptions used. The nature of assumptions used varied across the portfolio depending on the nature of each property but they included estimated capitol values, investment yields, construction costs and developers' margins In each of these areas, and on a sample basis, we compared the estimates and assumptions used by the Valuers against our own expectations, using evidence of comparable market transactions Where we identified estimates and assumptions that were outside the typical ranges used, we discussed these with the Valuers to understand the rationale and then assessed, based on all the available evidence and our experience in this sector, whether the use of the estimate or assumption was justified.

Our testing which involved the use of our internal real estate valuation specialists, qualified chartered surveyors with deep market knowledge, indicated that the estimates and assumptions used were appropriate in the context of the Group's property portfolios.

*SECOND MOST RANKED KAM IN THE REAL ESTATE INDUSTRY: TAXATION AND REGULATION***Taxation**

Refer to pages 62 to 64 (Audit Committee Report), pages 102 to 106 (Principal Accounting Policies) and pages 102 to 142 (Notes to the accounts)

Tax is a specific risk for the Group due to the degree of judgement involved in some of the ongoing activities of the Group and the wider Group restructuring. This gives rise to material tax considerations on the calculation, recognition, and classification of current and deferred tax balances from both a tax compliance and accounting perspective.

Judgements are made by management to arrive at the current and deferred tax position. These judgements include the impact of the transfer of investment properties and the Group holding structure.

**How our audit addressed the area of focus**

We assessed the principal assumptions and judgements made in arriving at the current and deferred tax position by using our experience of similar matters in the industry.

We used our tax specialists to evaluate tax provisions and potential exposures as at 31 December 2015, challenging the Group's assumptions and judgements through our knowledge of the tax circumstances and by reading relevant correspondence between the Group and Her Majesty's Revenue & Customs and the Group's external tax advisors.

Our testing did not identify any matters that the Directors had not adequately reflected in their calculation of the necessary current and deferred tax provisions.

*THIRD MOST OFTEN RANKED KAM IN THE REAL ESTATE INDUSTRY: REVENUE RECOGNITION***Revenue recognition (£192,129,000)**

Refer to pages 36 to 37 (Corporate governance report), page 91 (accounting policy) and pages 94 to 95 (financial disclosures)

**The risk** Revenue primarily consists of subscription fees and customer spend on additional advertising products in respect of properties listed on Rightmove Co. UK and is recognized over the period of subscription or as additional advertising products are used. Individual contracts exist with each customer, which include a variety of differing terms and conditions. Given the variety of individual contract terms and that revenue is the most material figure in the financial statements, we consider a significant risk exists in relation to revenue recognition specifically that the billing of customers is not in line with the contract terms, with resulting revenue not being recognized appropriately.

**Our response**

Our audit procedures included testing the design, implementation and operating effectiveness of the Group's controls over the billing of customers in line with contract terms and product usage. For Agency, New Homes and Overseas, which cover 95% of revenue recognized to the year, we performed detailed procedures using computer assisted audit techniques to analyse the amounts billed to customers by product in order to identify and investigate any anomalies and outliers. We considered whether amounts billed had been recognized as revenue in the correct accounting period by comparing the period of subscription or usage of additional advertising products to the timing of revenue recognition. We inspected significant contracts signed in the year on a sample basis to assess whether revenue has been recognized in accordance with the specific contract terms and conditions and relevant accounting standards. We assessed the appropriateness of deferred revenue at the period end with reference to subscription fee billings in December and specific product deferrals, where amounts are billed in advance but revenue recognition deferred until use or expiry. We also considered the adequacy of the Group's accounting policy and disclosures (see Notes 1, 2 and 5) in respect of revenue recognition, and whether disclosures properly reflect the risks inherent in recognizing revenue.

**Our findings:** Our testing did not identify weaknesses in the design and operation of controls that would have required us to expand the extent of our planned detailed testing. Our computer assisted audit techniques did not reveal any differences for which we were unable to appropriate explanation. We found that revenue was recognized in respect of the significant contracts selected for testing in line with the underlying contractual terms and we found no errors in the Group's calculation of deferred revenue at the yearend. We found the group's disclosures to be proportionate in their description of the assumptions and estimates made by the group.

*FOURTH MOST OFTEN RANKED KAM IN THE REAL ESTATE INDUSTRY: VALUATION OF CURRENT ASSETS***Valuation of inventories**

The Group's accounting policy on inventory is disclosed on page 112 and further details of inventory in note 12. The Group's inventory balance of £183.7m includes assets for resale (those being actively marketed) and properties being developed with a view to sale.

The Group has continued to use its own internal appraisal monitoring process during the year to assess the net realisable value (NRV) of those properties held within inventories through the preparation of appraisals for each site which calculate forecast revenues and costs.

The risk here is that the NRV could be overstated by using inappropriate forecast revenue and forecast cost to complete.

Moreover, management appraisals also include a number of judgements, assumptions and estimates regarding future costs and revenues. Given the quantum of the inventories balance recorded by the Group in its Financial Statements, a misstatement in this balance could have a material impact on the Financial Statements as a whole. At 30th November 2015, a limited proportion of inventory included on the Balance Sheet (mainly income generating inventory) is valued externally- this involves significant judgements as demonstrated under valuation of investment property.

The risk also involves proper classification and valuation of inventory items transferred to and from investment properties on a change in use of the property.

**How our audit addressed the area of focus**

We identified the various components of the Group's inventories and we sampled the balance of £183.7m and challenged management's appraisal documentation for a representative sample of £45m. We have challenged whether the expected revenues in site appraisals have been updated to reflect the cost and yields seen on similar assets in the investment property portfolio and challenged the key assumptions within the appraisals to supporting evidence through test of the management forecasts and valuation reports. Where a site has been appraised by management over a period of time, we have also sought to understand the changes to assumptions over time. In addition we have also reviewed a sample of marketed sites and post year-end sales prices to assess whether any inventory held is marketed below its valuation, challenged the lack of NRV write-downs identified in the current period and challenged whether evidence exists to reverse NRV write-downs recorded in prior periods through review of documentation supporting the status of the project and management's plans, and for a representative sample of income generating sites valued by the external valuers we assessed valuation yields used in appraisals for developments against yields used on the investment property portfolio in line with the work set out above on valuation of investment properties. Our real estate experts assisted us in this review.

For a representative sample we tested properties which have been transferred from investment property to inventories and from inventories to investment property during the year based on the documents, supporting management's plans for future use of the property, both to assess whether those transfers met the IFRS transfer criteria, and also that the properties transferred to inventories are properly valued.

*FIFTH MOST OFTEN RANKED KAM IN THE REAL ESTATE INDUSTRY: ACQUISITIONS***Accounting for the acquisition of Smiths Gore and SEB Refer to page 49 (Audit Committee Report), page 86 (Significant Accounting Policies) and pages 115 and 116 (Notes).**

During the year, the Group made a number of acquisitions including Smiths Gore in the UK, SEB Asset Management in Germany and Cooper Brady Partners in the US. On grounds of materiality, we considered the acquisition of Smiths Gore, a UK-based rural property management business, for total consideration of up to £33.1 m, and the acquisition of SEB, a European fund manager, for total consideration of £11.3m, to be the most significant.

The goodwill arising on the acquisitions of Smiths Gore and SEB is considered under the goodwill area of focus.

Accounting for the acquisitions required a provisional fair value exercise, including identifying and valuing separately identifiable intangible assets. The process of valuing the intangible assets can be a particularly subjective process.

**Fair value adjustments**

Management did not identify any additional exposures during either due diligence process that had not already been recorded at the balance sheet date and management recorded all the other assets and liabilities acquired at their fair values in the completion balance sheets.

Under IFRSs, the fair values of the acquired assets and liabilities are provisional and can be revised within the measurement period of one year from the date of acquisition.

**Valuation of identifiable intangibles**

Management identified customer relationships as the only separately identifiable intangible asset on acquisition of Smiths Gore, with a carrying value of £7.0m at 31 December 2015.

Management considered customer relationships to have an expected economic life of 15 years, based on the typical longevity of customer relationships within the business. Management identified institutional customer relationships as the separately identifiable intangible asset on acquisition of SEB, with a carrying value of £0.9m at 31 December 2015.

**How our audit addressed the area of focus****Fair value adjustments**

We assessed the completeness of the fair value assessment made by management against our own expectations, formed from reading the due diligence reports prepared during the acquisition and our audit work on the completion balance sheet with respect to the fair value of assets acquired.

Based on our understanding of the respective businesses, reading the SPA and our knowledge and experience of the industries in which they operate, we determined that management's analysis appropriately reflected the fair value exercises and that the relevant intangible assets had been identified.

**Valuation of identifiable intangible assets**

We looked in detail at the work performed on the purchase price allocations by management's external experts, to test the valuation placed on the separately identifiable intangibles.

We evaluated the professional competence and objectivity of those experts and challenged the key assumptions by sensitizing the following:

- The growth rates used and expected economic life of customer relationships in the valuation of customer relationships in Smiths Gore;
- The revenue projections and forecast margin assumptions underpinning the valuation of institutional customer relationships in SEB, and the expected remaining useful life; and
- The relevant discount rates applied to the valuation of the identified intangible assets in both Smiths Gore and SEB.

In doing so, we ascertained the extent of change that would be required for the fair value to be materially misstated and determined that the evidence was that such changes were not sufficiently possible.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the real estate industry

KAM	Real estate
Other	ST MODWEN PROPERTIES PLC
Provisions	SAVILLS PLC
Goodwill	SAVILLS PLC
Business combination	UNITE GROUP PLC

### **SIC CODE 67 Holding and other investment offices**

Out of the 350 constituents of the FTSE 350, 62 are active as holdings and other investment offices. Our dataset contains information about 38 of these companies. Holding and other investment offices is the third biggest industry in the sample.

#### **1) Number and length of KAM**

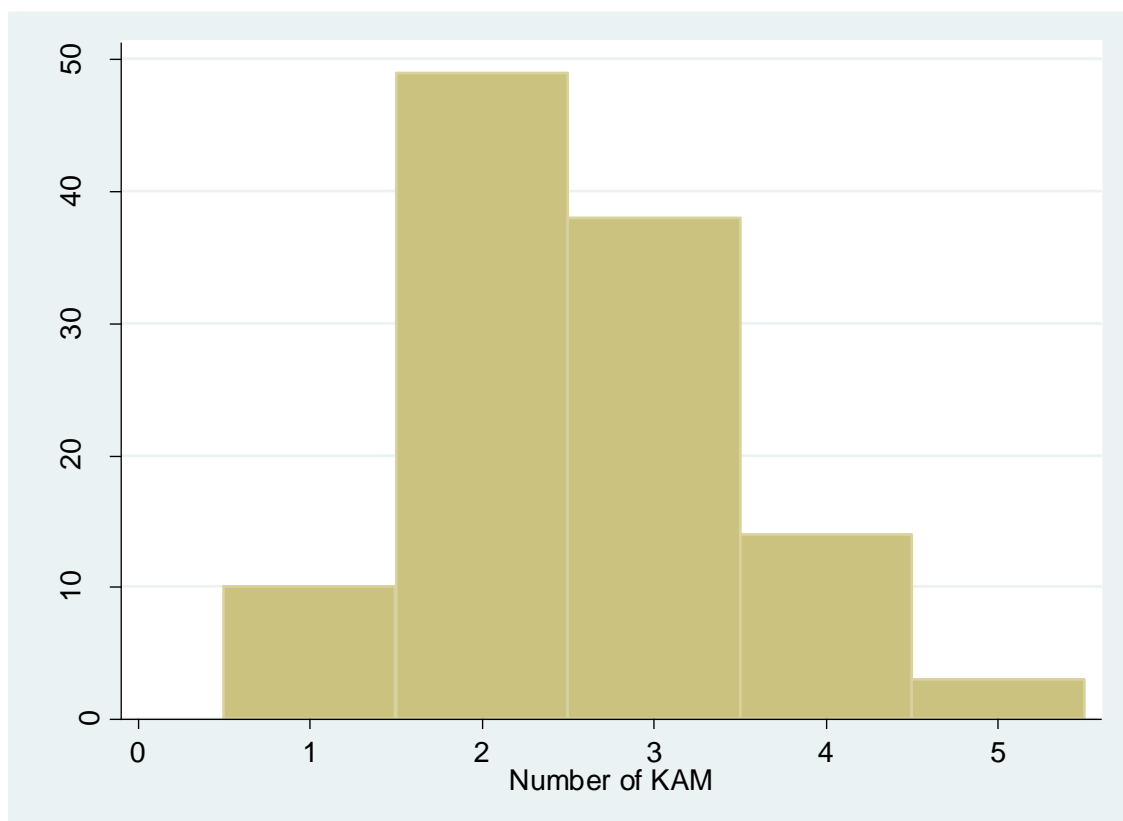
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	38	2.66	0.99	1	2	3	3	5
Number of KAM second year	38	2.58	0.98	1	2	2	3	5
Number of KAM third year	38	2.47	0.76	1	2	2	3	4
Number of KAM all years	114	2.57	0.91	1	2	2	3	5

**Table 1: The number of KAM of the holding and other investment offices**

Looking at the total sample period of three years we observe that the median number of KAM equals 2. The median of KAMs decreases from the first to the second year and remains constant afterwards. The variance in the number of KAMs is rather limited (0.91). While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive up to 5 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can conclude that the variance is rather limited with the number of KAMs most often included equals 2.



**Figure 1: Histogram of the number of KAM of the holding and other investment offices over the three year period**



Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	38	383	226	48	239	372	622	770
Length second year	38	750	469	55	415	720	781	2165
Length third year	38	872	482	232	534	785	1071	2068
Length all years	114	668	456	48	355	623	781	2165

**Table 2: Descriptive statistics of the length of the KAM section of holding and other investment offices**

Table 2 shows that the number of words of the KAM section equals on average 668 (median value of 623 words) using the three years as the sample period. We do observe a high difference between the minimum and the maximum value of the KAM length (between 48 words and 2165 words).

In spite of a decrease in the number of KAM, the length shows a strong increase over the three years. Table 2 shows that the average length of the KAM section increases every year, with the biggest growth happening from the first to the second year. Given the number of KAM decreases over time (see Table 1), this illustrates that the average length of a KAM increases from 284 in the first year to an average of 353 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 5, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active as a holding or other investment office discloses 2 KAMs (i.e. 293 KAMS in total for the 114 firm year observations) with an average length of 668 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is valuation of non-current assets (47.78%) followed by revenue recognition (28.67%), acquisitions (5.12%) and internal controls (5.12%). The category 'Other' includes KAM such as taxation and regulation, provision, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe a strong increase in the occurrence of revenue recognition KAMs (from 19.80% to 36.17%), while the occurrence of valuation of non-current assets slightly decreases but remains highly relevant (from 48.51% to 47.87%). The presence of acquisition KAMs remains stable (from 4.95% to 5.32%), while the internal control KAMs completely disappear in the third year (from 12.87% to 0.00%). This disappearance could illustrate that firms pay attention to the content of the KAM section and take the necessary actions when needed.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM decreases, the content of the KAM discussion section changes over time with more emphasis on revenue recognition.

	KAM	First year	Second year	Third year	All years
Most disclosed	Valuation of non-current assets	48.51%	46.94%	47.87%	47.78%
Second most disclosed	Revenue recognition	19.80%	30.61%	36.17%	28.67%
Third most disclosed	Acquisitions	4.95%	5.10%	5.32%	5.12%
Fourth most disclosed	Internal controls	12.87%	2.04%	0.00%	5.12%
Fifth most disclosed	Other	13.87%	15.31%	10.64%	13.31%

**Table 3: type of KAM KAMs most often disclosed with holding and other investment offices**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the five most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM
Valuation of non-current assets	71.43%	25.00%	3.57%	0.00%	0.00%
Revenue recognition	16.67%	53.57%	22.62%	5.95%	1.19%
Acquisitions	0.00%	40.00%	33.33%	20.00%	6.67
Internal controls	0.00%	33.33%	60.00%	6.67%	0.00%
Other	0.00%	33.33%	43.59%	20.51%	2.56%

**Table 4: Sequence of the five KAMs most often discussed with holding and other investment offices**

Valuation of non-current assets is the most important KAM and, when mentioned, is included most often as the first KAM (see Table 3). Revenue recognition is the second most important KAM and occurs most often as the second KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. Compared to other industries there is a high variation in the type of materiality basis used as 5 different materiality bases are used. From Table 5 it is clear that net assets is most often used to determine the materiality level (50.88%), followed by equity (23.68%). Total assets is used in 16.67% of the cases as the base for materiality. 7.02% uses an 'other' base and only 1.75% uses profit before tax.

Looking at the materiality level used, Q1 shows that the materiality percentage most often used for holding and other investment offices equals 1% with a maximum of 3%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Net assets	58	50.88	1.21	0.56	0.5	1	1	1	3
2	Equity	27	23.68	1.26	0.53	1	1	1	1	3
3	Total assets	19	16.67	1.16	0.34	1	1	1	1	2
4	Other	8	7.02	1.31	1.07	0.5	0.5	1	2	3
5	Profit before tax	2	1.75	3.25	2.47	1.5	1.5	3.25	5	5

**Table 5: The applied materiality level used with holding and other investment offices**

### 3) Summary of the main findings in holding and other investment offices

Holdings and other investment offices have a median number of KAMs of 2 with an average length of 260 words per KAM. While the number of KAM decreases, the content of the KAM section changes with more emphasis on revenue recognition. Valuation of non-current assets is the most important KAM in the industry and often occurs as the first KAM in the report, which is not surprising given the type of industry. Finally, descriptive statistics show that net assets is the materiality basis used and the average materiality percentage equals 1.21%.

From the comparison with the total sample, we observe that holding and other investment offices is an industry with less KAMs mentioned than in the whole sample. The specific nature of the 'holding and other investment offices' industry also explains why acquisitions and business combinations occur in the top 5 of most often disclosed KAMs while they do not occur in top 5 of the total sample.

	Holding and other investment offices	Total sample
Number of KAM (median)	2	4
Length per KAM	260	305
Most common type	<ol style="list-style-type: none"> <li>1. Valuation of non-current assets (First rank)</li> <li>2. Revenue recognition</li> <li>3. Acquisitions</li> <li>4. Internal controls</li> <li>5. Business combination</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation &amp; regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in holding and other investment offices**

## Appendix 1: Frequency table of the KAMs disclosed with holding and other investment offices

KAM	Frequency	Percentage
Valuation of non-current assets	140	47.78
Revenue recognition	84	28.67
Acquisitions	15	5.12
Internal controls	15	5.12
Business combination	9	3.07
Taxation and regulation	7	2.39
Financial instruments	7	2.39
Valuation	5	1.71
Presentation and disclosure	4	1.37
Other	4	1.37
Going concern	1	0.34
Provision	1	0.34
Impairment	1	0.34
Total	293	100

**Table 7: Frequency table of the different types of KAM (three year period) of holding and other investment offices**

**Appendix 2: Example of the longest KAM with holding and other investment offices**

Land Securities Group plc (2016 – Valuation of non-current assets, 933 words)

**The valuation of the investment property portfolio**

2016: £12,357.7m in investment properties and £1,629.9m (the Group's share) in investment properties held in joint ventures (2015: £12,158.0m in investment properties and £1,403.0m in investment properties held in joint ventures)

*Refer to the Accountability section of the Annual Report (pages 65-68); Accounting policies (pages 99-100); Note 15 of the Financial Statements (pages 113-116); and Note 16 of the Financial Statements (pages 117-121)*

The valuation of investment property (including properties within the development programme and investment properties held in joint ventures) requires significant judgement and estimates by management and the external valuers. Any input inaccuracies or unreasonable bases used in these judgements (such as in respect of estimated rental value and yield profile applied) could result in a material misstatement of the income statement and balance sheet.

We also note that this risk has increased since last year given the stage of the property cycle and in light of current market conditions which have reduced the volume of transactions in some parts of the property investment market.

There is also a risk that management may influence the significant judgements and estimates in respect of property valuations in order to achieve property valuation and other performance targets to meet market expectations or bonus targets.

**Our audit procedures around the valuation of investment property included:**

We evaluated the Group's controls over data used in the valuation of the investment property portfolio and management's review of the valuations.

We evaluated the competence of the external valuers which included consideration of their qualifications and expertise.

We assessed the Group's change in external valuers during the year. We met with the new external valuer to discuss their valuation approach and the judgements they made in assessing the property valuation for the first time and we obtained an understanding of where the approach or assumptions differed from those used by the predecessor external valuers.

We performed testing over source documentation provided by the Group to the external valuers. This included agreeing a sample of this documentation back to underlying lease data and vouching costs incurred to date data provided in respect of development properties. We also assessed the reasonableness of the costs to complete information in respect of properties in the course of development by comparing the total forecast costs to contractual arrangements and approved budgets.

We included Chartered Surveyors on our audit team who reviewed and challenged the valuation approach and assumptions for a sample of properties which comprised 70% of the market value of investment properties (including investment properties held in joint ventures). Our Chartered Surveyors compared the equivalent yields applied to each property to an expected range of yields taking into account market data and asset specific considerations. They also considered whether the other assumptions applied by the external valuers, such as the estimated rental values, voids, tenant incentives and development costs to complete were supported by available data such as recent lettings and occupancy levels the findings from our audit work described above and to seek further explanations as required. We also discussed the impact of current market conditions on the property valuations.

We conducted detailed analytical procedures by forming an expectation of the market value of each property in the portfolio by reference to our understanding of the UK real estate market, external market data and asset specific considerations to evaluate the appropriateness of all of the valuations adopted by

the Group. We investigated further the valuations of those properties which were not in line with our initial expectations which included further discussions with management and the external valuers and, where appropriate, involvement of our Chartered Surveyors.

We attended meetings between management and the external valuers to assess for evidence of management influence and we obtained a confirmation from the external valuers that they had not been subject to influence from management.

We utilised our detailed analytical procedures and work of the Chartered Surveyors described above in order to assess for evidence of undue management influence.

We performed site visits accompanied by our Chartered Surveyors for a sample of properties (focusing primarily on development properties) which enabled us to assess the stage of completion of, and gain specific insights into, these developments.

We met with project managers for major properties under development and assessed project costs, progress of development and leasing status and considered the reasonableness of forecast costs to complete included in the valuations as well as identified contingencies, exposures and remaining risks. We corroborated the information provided by the project managers through valuation review, site visits and cost analysis. We also reviewed development feasibilities and monthly development spend against budget.

#### **Scope of our procedures**

We performed full scope audit procedures over valuation of the whole of investment property (including properties within the development programme and investment properties held in joint ventures).

We conclude that management provided an appropriate level of review and challenge over the valuations but did not identify evidence of undue management influence.

#### **What we concluded to the audit committee**

We have audited the inputs, assumptions and methodology used by the external valuers. We conclude that the methodology applied is reasonable and that the external valuations are an appropriate assessment of the market value of investment properties at 31 March 2016.

Our Chartered Surveyors concluded that the sample of valuations they reviewed were reasonable.

We conclude that management provided an appropriate level of review and challenge over the valuations but did not identify evidence of undue management influence.

**Appendix 3: Longest KAMs of the five most common KAMs with holding and other investment offices****FIRST RANKED KAM OF HOLDING AND OTHER INVESTMENT OFFICES: VALUATION OF NON-CURRENT ASSETS****The valuation of the investment property portfolio**

2016: £12,357.7m in investment properties and £1,629.9m (the Group's share) in investment properties held in joint ventures (2015: £12,158.0m in investment properties and £1,403.0m in investment properties held in joint ventures)

Refer to the Accountability section of the Annual Report (pages 65-68); Accounting policies (pages 99-100); Note 15 of the Financial Statements (pages 113-116); and Note 16 of the Financial Statements (pages 117-121).

The valuation of investment property (including properties within the development programme and investment properties held in joint ventures) requires significant judgement and estimates by management and the external valuers. Any input inaccuracies or unreasonable bases used in these judgements (such as in respect of estimated rental value and yield profile applied) could result in a material misstatement of the income statement and balance sheet.

We also note that this risk has increased since last year given the stage of the property cycle and in light of current market conditions which have reduced the volume of transactions in some parts of the property investment market.

There is also a risk that management may influence the significant judgements and estimates in respect of property valuations in order to achieve property valuation and other performance targets to meet market expectations or bonus targets.

**Our response to the risk**

Our audit procedures around the valuation of investment property included:

-We evaluated the Group's controls over data used in the valuation of the investment property portfolio and management's review of the valuations.

-We evaluated the competence of the external valuers which included consideration of their qualifications and expertise.

-We assessed the Group's change in external valuers during the year. We met with the new external valuer to discuss their valuation approach and the judgements they made in assessing the property valuation for the first time and we obtained an understanding of where the approach or assumptions differed from those used by the predecessor external valuers.

-We performed testing over source documentation provided by the Group to the external valuers. This included agreeing a sample of this documentation back to underlying lease data and vouching costs incurred to date data provided in respect of development properties. We also assessed the reasonableness of the costs to complete information in respect of properties in the course of development by comparing the total forecast costs to contractual arrangements and approved budgets.

-We included Chartered Surveyors on our audit team who reviewed and challenged the valuation approach and assumptions for a sample of properties which comprised 70% of the market value of investment properties (including investment properties held in joint ventures). Our Chartered Surveyors compared the equivalent yields applied to each property to an expected range of yields taking into account market data and asset specific considerations. They also considered whether the other assumptions applied by the external valuers, such as

the estimated rental values, voids, tenant incentives and development costs to complete were supported by available data such as recent lettings and occupancy levels.

-Together with our Chartered Surveyors, we met with the external valuers to discuss the findings from our audit work described above and to seek further explanations as required. We also discussed the impact of current market conditions on the property valuations.

-We conducted detailed analytical procedures by forming an expectation of the market value of each property in the portfolio by reference to our understanding of the UK real estate market, external market data and asset specific considerations to evaluate the appropriateness of all of the valuations adopted by the Group. We investigated further the valuations of those properties which were not in line with our initial expectations which included further discussions with management and the external valuers and, where appropriate, involvement of our Chartered Surveyors.

-We attended meetings between management and the external valuers to assess for evidence of management influence and we obtained a confirmation from the external valuers that they had not been subject to influence from management.

-We utilised our detailed analytical procedures and work of the Chartered Surveyors described above in order to assess for evidence of undue management influence.

-We performed site visits accompanied by our Chartered Surveyors for a sample of properties (focusing primarily on development properties) which enabled us to assess the stage of completion of, and gain specific insights into, these developments.

-We met with project managers for major properties under development and assessed project costs, progress of development and leasing status and considered the reasonableness of forecast costs to complete included in the valuations as well as identified contingencies, exposures and remaining risks. We corroborated the information provided by the project managers through valuation review, site visits and cost analysis. We also reviewed development feasibilities and monthly development spend against budget.

#### **Scope of our procedures**

We performed full scope audit procedures over valuation of the whole of investment property (including properties within the development programme and investment properties held in joint ventures).

#### **What we concluded to the audit committee**

We have audited the inputs, assumptions and methodology used by the external valuers. We conclude that the methodology applied is reasonable and that the external valuations are an appropriate assessment of the market value of investment properties at 31 March 2016.

Our Chartered Surveyors concluded that the sample of valuations they reviewed were reasonable.

We conclude that management provided an appropriate level of review and challenge over the valuations but did not identify evidence of undue management influence.



*SECOND MOST RANKED KAM OF HOLDING AND OTHER INVESTMENT OFFICES: REVENUE RECOGNITION***Revenue recognition, including the timing of revenue recognition, the treatment of rents, incentives and recognition of trading property proceeds**

2016: £603.4m rental income and £194.9m trading property sales proceeds (2015: £575.7m rental income and £55.5m trading property sales proceeds).

Refer to the Accountability section of the Annual Report (pages 65-68); Accounting policies (pages 99-100); and Note 5 of the Financial Statements (page 104).

Our risk description differs from 31 March 2015 in that we no longer include other property income as part of our risk. We also included the recognition of trading property proceeds for the year ended 31 March 2016 given the completion of Kings Gate property.

Market expectations and revenue profit based targets may place pressure on management to distort revenue recognition. This may result in overstatement or deferral of revenues to assist in meeting current or future targets or expectations

**Our response to the risk**

Our audit procedures around revenue recognition included:

-We carried out testing relating to controls over revenue recognition and the treatment of rents which have been designed by the Group to prevent and detect fraud and errors in revenue recognition. This included testing the controls governing approvals and changes to lease terms and the upload of this information to the Group's property information management system.

-We also performed controls testing on the billings process.

-We performed detailed testing for a sample of revenue transactions by agreeing them back to lease agreements. This included focusing upon incentives included within lease agreements and we critically assessed whether the appropriate accounting treatment had been followed.

-We agreed a sample of lease agreements to the spreadsheets used to calculate straight-lining of revenue in accordance with SIC-15 Operating Leases — Incentives and corroborated the arithmetical accuracy of these spreadsheets and the resulting amounts in revenue for straight-lining of incentives.

-Detailed analytical procedures were performed in connection with revenue (including rents, incentives and other property related revenue) to assess whether revenue had been recognised in the appropriate accounting period.

-We challenged the assessment of recoverability of the tenant lease incentive receivable balance by evaluating the financial viability of the major tenants with related lease incentive debtors.

-We assessed whether the revenue recognition policies adopted complied with IFRSs as adopted by the European Union.

-We performed audit procedures specifically designed to address the risk of management override of controls including journal entry testing, which included particular focus on journal entries which impact revenue.

-We tested a sample of contracts recognised as trading property proceeds during the year to verify that revenue is recognised when the significant risks and rewards of ownership have been transferred to the buyer.

**Scope of our procedures**

The whole Group was subject to full scope audit procedures over revenue.

**What we concluded to the audit committee**

We audited the timing of revenue recognition, treatment of rents and incentives and recognition of trading property proceeds and assessed the risk of management override. Based upon the audit procedures performed, we concluded that revenue has been recognised on an appropriate basis in the year.

*THIRD MOST OFTEN RANKED KAM OF HOLDING AND OTHER INVESTMENT OFFICES: ACQUISITIONS***Acquisition of Puerto Venecia, Zaragoza and subsequent part disposal**

On 19 January 2015 Intu acquired the Puerto Venecia shopping centre in Zaragoza, Spain, with consideration of €273.5 million paid in return for investment property valued at €450.8 million, together with other assets and liabilities (including €181.0 million of external debt which was repaid and refinanced on acquisition) The acquisition was treated as a business combination Refer to note 40.

Subsequently, on 30 September 2015, the Group entered into a joint venture agreement with CPPIB (Intu properties' partner in the Parque Principado shopping centre), selling 50 per cent of its interest in Puerto Venecia for consideration of €122.3 million. This part disposal has resulted in Puerto Venecia, previously accounted for as a subsidiary, being accounted for as a joint venture from the date of part disposal Refer to note 41.

**How our audit addressed the area of focus**

With respect to the acquisition of Puerto Venecia we inspected the purchase agreements and assessed management's determination of the fair value of assets and Liabilities acquired, including the valuation methodology applied and the assumptions underlying the acquisition date valuation. We assessed whether the classification as a business combination and treatment of the various aspects of the transaction were in accordance with IFRS 3 Business Combinations which defines a business as an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or other owners, members or participants". Key factors we considered were that the acquisition involved the purchase of relevant inputs (the property and leases) and processes (including staff and management contracts to run the centre) that would enable the purchased business to operate independently of the rest of the Group in order to generate a return.

With respect to the part disposal, we read the sale and purchase agreement and other documents related to the sale to check whether it was appropriate to account for Puerto Venecia as a joint venture.

No issues arose from these procedures the shareholders' agreement grants each party an equal number of board members all with equal voting rights and, because all decisions about the relevant activities of the business require the consent of both parties, Puerto Venecia was deemed to be subject to joint control.

We also considered the disclosures in the financial statements in respect of the initial acquisition and the subsequent part disposal and found that they were in accordance with applicable accounting standards (IFRS 3 Business Combinations and IFRS 12 Disclosure of Interests in Other Entities).

*FOURTH MOST OFTEN RANKED KAM OF HOLDING AND OTHER INVESTMENT OFFICES: PRESENTATION AND DISCLOSURE***Presentation and Disclosure - FRS 10;**

The financial statements are prepared in compliance with the AIC SORP, Companies Act and FRS 102, including financial statements disclosures and presentation.

As this is the first year FRS 102 was implemented, we focused on whether the financial statements were presented in compliance with FRS 102 as well as the compliance of AIC SORP, Companies Act 2006 and the Listing Rules.

**How our audit addressed the area of focus**

The financial statements for the year ended 31 March 2016 have been prepared for the first time under FRS 102. We have assessed that the changes applicable to the Company have been implemented, this includes the amendments to the disclosure of fair value hierarchy information and presentational aspects relating to the Statement of Financial Position. No issues were noted in the presentation of the financial statements.

The new UK Corporate Governance Code was published in September 2014, with a further update published on 23 October 2015. The new Code requires disclosure of a viability statement, a robust assessment of risks and a new-style going concern confirmation in the Annual Report. We have reviewed the information provided in the Annual Report and Accounts and no issues were noted in disclosure of corporate governance.

*FIFTH MOST OFTEN RANKED KAM OF HOLDING AND OTHER INVESTMENT OFFICES: BUSINESS COMBINATIONS***Investment in BlackRock Workspace Property Trust joint venture ('BlackRock JV')**

Refer to page 94 (Audit Committee Report), pages 147 to 148 (Notes to the financial statements - note 12(a)), page 135 (Significant judgements, key assumptions and estimates), and page 137 (Significant accounting policies).

We focused on this area due to the particular judgement surrounding the continued treatment of the investment as a joint venture given Workspace's 20.1% investment, and the accounting treatment and recognition of the performance fee in the current year.

Management concluded that based on their day to day operation and the contractual arrangements in place, BlackRock JV was a joint venture at 31 March 2016 and should be equity accounted in the Group Financial Statements.

Under the joint venture agreement, Workspace is entitled to a performance fee for the services it provided in its capacity as the property manager of the joint venture from the date of inception until the earlier of the end of the service period, being 22 February 2016, or exit from the joint venture agreement. The fee is based on outperformance of benchmarks specified in the joint venture agreement and completion of the service period.

Based on the criteria above, Workspace has recognised a performance fee of £24.1m within 'Other Income' in the Consolidated income statement. An accrual for the full value of this liability has been recognised by the BlackRock JV in their accounts.

**How our audit addressed the area of focus**

We obtained and read the documentation and contracts governing the structure of the joint arrangement, the relevant board minutes and other supporting information. This provided sufficient evidence that Workspace has shared control over the key strategic and operational decisions meaning that, consistent with the prior year, it was appropriate for the BlackRock JV investment to be equity accounted for as a joint venture.

We were also satisfied that sufficient and appropriate disclosures in accordance with IFRS 11 have been included within note 12(a) to the Consolidated financial statements.

We obtained management's calculations supporting the value of the performance fee and were able to confirm that the inputs to, and mechanics of, the calculation were accurate and in line with the contract. Management obtained confirmation of the amount due by the other joint venture partner.

We were satisfied that the recognition of the performance fee in the current period was appropriate as the service period has expired and the amount can now be reliably estimated.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM with holding and other investment offices

KAM	Holding and other investment offices
Financial instruments	SEGRO PLC
Valuation	SEGRO PLC
Business combination	WORKSPACE GROUP PLC

### **SIC CODE 73 Business services**

The industry classification is based on the SIC 2 code, resulting in 18 industries. The dataset consists of 263 companies belonging to the FTSE 350. These firms are divided into 18 different industries based on the SIC 2 code.

Out of the 350 constituents of the FTSE 350, 27 are active in the business services industry. Our dataset contains information about 17 of these companies. Related to the amount of firms active in the industry, the size of the business services industry is close to the average industry size in the FTSE 350 of 19.44 firms.

#### **1) Number and length of KAM**

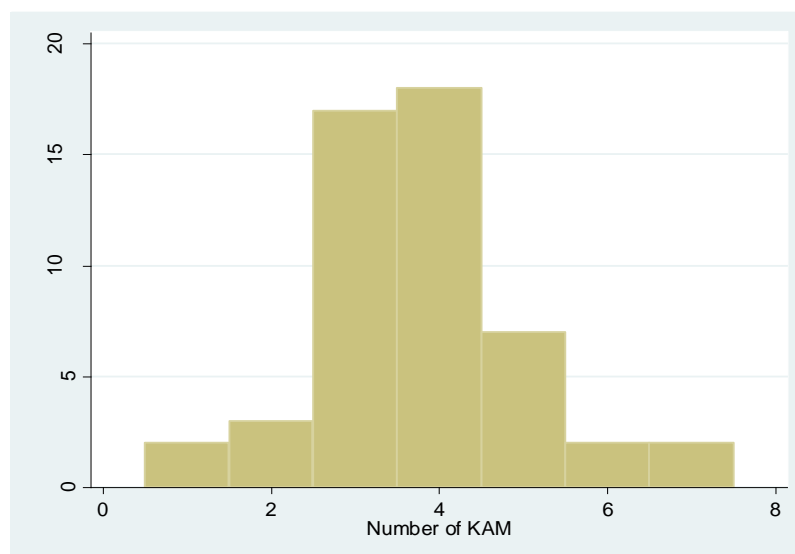
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	17	3.88	1.22	1	3	4	4	7
Number of KAM second year	17	3.71	1.10	2	3	4	4	6
Number of KAM third year	17	3.71	1.44	1	3	3	4	7
Number of KAM all years	51	3.76	1.24	1	3	4	4	7

**Table 1: The number of KAM in the business services industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 4 although for the median firm in the industry of business services the number of KAM decreases from 4 to 3 in the third year. The variance is relatively high (1.24), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 1 KAM, some firms receive up to 7 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals the median of 4. It should also be noted that a high number of companies receive 3 KAMs.



**Figure 1: Histogram of the number of KAM in the business services industry over the three year period**

Table 2 provides the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	17	890	499	120	523	884	1060	2008
Length second year	17	1222	373	735	1022	1135	1395	2308
Length third year	17	1504	998	522	1019	1319	1549	4981
Length all years	51	1205	712	120	884	1114	1395	4981

**Table 2: Descriptive statistics of the length of the KAM section in the business services industry**

Table 2 shows that the number of words of the KAM section equals on average 1205 (median value of 1114 words) using the three years as the sample period. We also observe a very high variance between the minimum and the maximum value of the KAM length (between 120 and 4981 words).

In despite of a decrease in the number of KAM, the length shows a big increase over the three years. Table 2 shows that the average length of the KAM section further increases every year. Given the number of KAM is decreasing over time (see Table 1), this illustrates that the average length of a KAM discussed in the business services industry increases from 225 in the first year to an average of 500 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (1 to 7, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the business services industry discloses 4 KAMs (i.e. 192 KAMS in total for the 51 firm year observations) with an average length of 1205 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the business services industry.

It is clear that the KAM most often disclosed is revenue recognition (22.92%) followed by goodwill (17.19%), taxation and regulation (14.58%) and provisions (7.81%). The category 'Other' includes KAM such as acquisitions, impairment,... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a revenue recognition KAM slightly increases, while the occurrence of goodwill (from 19.70% to 14.29%) and taxation and regulation (from 16.67% to 11.11%) significantly drops every year.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM decreases, the content of the KAM discussion section changes over time with more emphasis on revenue recognition and less emphasis on goodwill and taxation and regulation.



	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	21.21%	23.81%	23.81%	22.92%
Second most disclosed	Goodwill	19.70%	17.46%	14.29%	17.19%
Third most disclosed	Taxation and regulation	16.67%	15.87%	11.11%	14.58%
Fourth most disclosed	Provisions	6.06%	7.94%	9.52%	7.81%
Fifth most disclosed	Other	36.36%	34.92%	41.27%	37.50%

**Table 3: Type of KAM most often disclosed in the business services industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the five most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM
Revenue recognition	59.10%	15.91%	18.18%	6.82%	0.00%	0.00%	0.00%
Goodwill	9.09%	48.48%	27.27%	6.06%	9.09%	0.00%	0.00%
Taxation and regulation	0.00%	17.86%	35.71%	35.71%	7.14%	0.00%	3.57%
Provisions	33.33%	40.00%	20.00%	0.00%	6.67%	0.00%	0.00%
Other	23.61%	22.22%	22.22%	18.06%	6.94%	5.56%	1.39%

**Table 4: Sequence of the five KAMs most often discussed in the business services industry**

Table 3 showed that revenue recognition is the most important KAM in the industry. When looking at table 4, we can see that over 50% of the revenue recognition KAMs is mentioned as the first KAM.

We also see that when a goodwill KAM is included in the report, it will most likely occur as the second KAM which is in line with the relative occurrence in the total sample.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is the materiality level most often used (88.23%), only 5.88 % uses revenue or EBITDA. That revenue or EBITDA as the materiality base is an exception is also shown by the absolute number which only equals 3 firm year observation.

Looking at the materiality level used, Q1 as well as Q2 as Q3 show that a materiality level of 5% is most commonly used in the business services industry. However, the minimum value of 3.6% and the maximum value of 7% shows that there is some variation within the business industry services.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	45	88.23	4.96	0.53	3.6	5	5	5	7
2	EBITDA	3	5.88	5	0	5	5	5	5	5
3	Revenue	3	5.88	1.73	0.74	0.9	0.9	2	2.3	2.3

**Table 5: The applied materiality level in the business services industry**

### 3) Summary of the main findings in the business services industry

In the business services industry the median number of KAM mentioned is 4 with an average length of 320 words per KAM. While the number of KAM decreases over the three years studied, the content of the KAM section changes with more emphasis on revenue recognition. Revenue recognition is the most important KAM and, if present, is often mentioned as the first KAM. Finally, profit before taxes is the materiality basis most commonly used and the average materiality percentage equals 5%.

	Business services	Total sample
Number of KAM (median)	4	4
Length per KAM	320	305
Most common type	<ol style="list-style-type: none"> <li>1. Revenue recognition (first rank)</li> <li>2. Goodwill</li> <li>3. Taxation &amp; regulation</li> <li>4. Provisions</li> <li>5. Other</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation &amp; regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in the business services industry**

Appendix 1: Frequency table of the KAMs disclosed in the business services industry
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KAM	Frequency	Percentage
Revenue recognition	44	22.92
Goodwill	33	17.19
Taxation and regulation	28	14.58
Provisions	15	7.81
Acquisitions	14	7.29
Presentation and disclosure	14	7.29
Valuation of non-current assets	14	7.29
Employee benefits	10	5.21
Internal controls	7	3.65
Business combinations	5	2.60
Valuation	3	1.56
Impairment	2	1.04
Going concern	1	0.52
Valuation of current assets	1	0.52
IT	1	0.52
Total	192	100

**Table 7: Frequency table of the different types of KAM (three year period) in the business services industry**

**Appendix 2: Example of the longest KAM in the business services industry**

G4S plc (2015 – Presentation and disclosure, 769 words)

**Area of focus: Restatements**

A number of prior period errors have been identified either as a result of our opening balance sheet procedures or from management's review of the group's balance sheet. Each of these adjustments was deemed to be material to the consolidated financial statements and has been restated accordingly as set out in note 3. The cumulative impact of these restatements was £48m on opening reserves at 1 January 2015 and a £7m reduction to profit in 2014.

**Denmark alarms accounting**

We undertook a detailed review of the group's accounting for alarm sales in Denmark. Considering both the legal form and economic substance of these arrangements, this review resulted in management making a number of changes to revenue recognition practices for sales of rental and non-rental alarms. In addition, the group's historical treatment of sale and leaseback transactions as operating rather than finance in nature was found to be inappropriate. In both cases, the errors had given rise to the acceleration of recognition of profit in prior years. The cumulative impact of these errors on the opening balance sheet at 1 January 2015 was £28m.

How our audit addressed the area of focus

We assessed whether the prior year accounting practices were appropriate and in accordance with IFRS given the legal form and economic substance of the arrangements between the group, its customers and the leasing company.

The change in accounting approach was supported by corroborating evidence such as underlying contractual arrangements, the net present value of future lease payments and the useful economic life of the alarms.

We performed audit procedures to test the completeness, accuracy and valuation of the adjustments made by management and to confirm that the group's disclosures in respect of this restatement as disclosed in note 3 were reasonable.

**Africa balance sheet review**

Following the appointment of new regional leadership in 2015, the ongoing review of the Africa balance sheet was completed. The review was performed on a country-by-country basis and focused on the recoverability of assets, completeness of liabilities and reconciliations between the underlying country ledgers and group consolidation system. Following this review, a number of adjustments were identified amounting to £26m in aggregate.

An analysis was subsequently performed by management to assess whether the adjustments represented a prior period error or change in estimate.

**How our audit addressed the area of focus**

With the assistance of our regional and country component audit teams, we examined management's analysis on a country-by-country basis and assessed the validity and accuracy of each of the adjustments. This work was further supported by our 2015 substantive audit procedures in the in-scope African countries.

We assessed management's classification of each adjustment as either an error or change in estimate and the group's disclosure of items as such in note 3(w). Based on these procedures, we determined that the amounts deemed by management to be prior period errors and subject to restatement were consistent with the findings from our audit and that appropriate disclosure has been made.

**Accounting for acquisitions and disposals in North America between 2007 and 2014**

A number of prior period adjustments have arisen from the accounting for acquisitions and disposals in North America between 2007 and 2014. These adjustments mainly relate to the incorrect recognition of deferred tax liabilities and associated goodwill on US acquisitions in 2008 and 2009. In addition, certain errors were identified relating to the calculation of profits or losses on disposal of businesses in 2014 including the need to recycle cumulative foreign exchange from reserves on disposal of overseas subsidiaries. The aggregate impact of these errors on the opening balance sheet at 1 January 2015 was £6m.

Refer to Audit Committee report on page 68 and to note 3(w) of the group financial statements.

**How our audit addressed the area of focus**

We assessed the validity and accuracy of each adjustment with reference to the company's initial acquisition and disposal accounting judgements taken in prior years, underlying tax reconciliations and composition of reserves. As part of this assessment, we considered the root cause of the underlying errors and performed additional audit testing in North America and on the group's reserve balances in order to satisfy ourselves that no further material errors remained undetected. Based on these procedures, we satisfied ourselves that the adjustments identified were reasonable.

For each of the three prior period errors subject to restatement, which are described above, we considered whether similar errors had arisen elsewhere in the group. We did not identify any other errors impacting prior years that are material individually or in aggregate. No other material items arose from our procedures on the opening balance sheet.

**Appendix 3: Longest KAMs of the five most common KAMs in the business services industry****FIRST RANKED KAM IN THE BUSINESS SERVICES INDUSTRY: REVENUE RECOGNITION****Risk: Inappropriate revenue recognition on rental licence software contract - £90.6m (2015: £97.5m)**

Refer to the Audit Committee Report (page 46); Accounting policies (page 111); and Note 2 of the Consolidated Financial Statements (page 80)

Due to complex contractual arrangements, the risk in particular is inappropriate application of the group revenue recognition policy and IAS 18 (Revenue) for rental licence revenue recognition which could result in, for example, revenue being recorded when performance conditions have not been satisfied, incorrect deferral of revenue for support and maintenance and other obligations; and inappropriate licence revenue recognition in relation to cut off for all significant revenue streams, as revenue may not have been recognised in the correct accounting period.

**Our response to the risk**

We have reviewed and walked through the central process over the approval and recognition of revenue contracts across the group.

We have walked through and assessed the design effectiveness of key management controls over data input and IT.

A summary of our key procedures are:

We have performed rental licence revenue sample transaction testing at a local and group level to ensure that revenue has been recorded in accordance with the Group's revenue recognition policy and IAS 18 and has been appropriately recorded in the current year income statement or deferred on the balance sheet as appropriate. This was achieved by testing a sample of contracts by

- agreeing licence revenues through to signed contracts or software licence agreements.
- agreeing the revenue through to subsequent payment as evidence of collectability.
- checking evidence to support that software has been delivered to customers and therefore correct timing of revenue recognition.
- reviewing contract terms for any conditions that would impact the timing of the revenue recognition and in turn the completeness of deferred revenue
- ensuring appropriate allocation of the fair value and recognition of revenue for other deliverables included within the contract
- assessing whether revenue has been recognised in line with the Group's revenue recognition policy and IAS 18.

We have performed journals testing by selecting a sample of revenue journals and assessed the appropriateness of the journal by checking to supporting evidence and ensuring compliance with the Group's revenue recognition policy and IAS 18. The sample selected was based on risk based criteria including but not limited to manual journal entries, those close to period end and postings that are inconsistent with roles and responsibilities.

We have tested management's methodology surrounding the fair value of the support and maintenance element of the revenue contracts. To better understand the nature of the contractual relationships with customers, any contractual issues or any ongoing contractual obligations, we made enquiries of management within the business, including the sales team and legal counsel to ensure that appropriate obligations and commitments had been recorded in the financial statements.

We have performed a test of detail on a sample of deferred revenue and accrued revenue items to ensure it is in accordance with the revenue recognition principles.

We have performed cut-off testing for a sample of revenue items booked either side of year end to ensure that license revenue was only recognised for software in the period where the contract was signed by both AVEVA and the customer prior to yearend and the software has been made available prior to the year end.

As a primary team we gained oversight of the testing performed by the overseas teams through:

- Our review of their reporting deliverables where they are required to report on any exceptions identified from their testing and unusual contractual terms and conditions;

- Reviewing contracts meeting the Board review threshold and;

- Reviewing any contracts identified as having unusual terms or conditions by management and/or overseas audit teams to confirm appropriate recognition of revenue in accordance with the contract accounting policy.

We performed full and specific scope audit procedures over this risk area in 13 locations, which covered 81% of revenue.

**What we concluded to the Audit Committee**

We conclude that revenue recognised in the year, and deferred as at 31 March 2016, is materially correct

*SECOND MOST RANKED KAM IN THE BUSINESS SERVICES INDUSTRY: GOODWILL***Goodwill impairment**

The group has £ 1.83bn of goodwill at 31 December 2015 (2014: £ 1.92bn).

During the year, the group recognised an impairment charge of £66m largely relating to the Estonia (£25m), South Africa Cash (£9m), Brazil Technology (£12m), Serbia (£8m), Papua New Guinea (£5m) and China Systems (£4m) cash generating units ("CGUs"). With the exception of Estonia, all impairments related to businesses classified by management as portfolio businesses held for sale or closure.

Management determines the recoverable amount of a CGU as the higher of value in use ("VIU") or fair value less cost of disposal ("FVLCD") for continuing operations. For portfolio businesses where management is committed to either sell or exit the business, a market valuation or market participant cash flows are used.

The carrying value of goodwill is contingent on future cash flows and there is risk if these cash flows do not meet the group's expectations that the assets will be impaired. The impairment reviews performed by the group contain a number of significant judgements and estimates including revenue growth, profit margins, cash conversion and long-term growth and discount rates. Changes in these assumptions can have a significant impact on the headroom available in the impairment calculations.

In the current year, management has revised its specific cash flow forecasting period from 15 years to five years to align the forecast projections to the group's budgeting period.

Refer to Audit Committee report on page 68 and to note 18 of the group financial statements.

**How our audit addressed the area of focus**

We assessed the mathematical accuracy of management's cash flow model and appropriateness of the change in the forecast period. The forecast period was found to be in line with the group's budget and strategic outlook.

We agreed the underlying forecasts to board approved budgets and assessed how these budgets were compiled.

With the support of our valuations experts, we assessed the terminal growth rates and discount rates applied by management to third party information and confirmed they fell within a reasonable range of external market data. Where they did not, we applied our independent view of a more appropriate rate to management's forecast.

We considered the reliability of management's forecasting for revenue, profit and cash conversion by comparing budgeted results to actual performance over a period of two years which we considered appropriate. Where we identified significant shortfalls against budget in prior years, this informed our determination of sensitivities to apply as we formed our independent view about reasonable downside scenarios.

We performed our own risk assessment by considering historical performance, forecasting accuracy and modelled headroom to highlight the CGUs with either a lower headroom or which are more sensitive to changes in key assumptions. We also considered the valuation multiple implied by management's estimate. Following these procedures, we focused our attention on the Estonia, South Africa Cash, Brazil Security and Greece CGUs.

We performed our own sensitivity analysis to understand the impact of changes in the assumptions on the available headroom. We focused in particular on Estonia and Brazil Security which are more sensitive to changes in assumptions than other CGUs.

Our sensitivity analysis highlighted that the Estonia and Brazil Security CGUs were particularly sensitive to changes in the discount rate. The Estonia CGU was also found to be sensitive to changes in future growth rates. We critically challenged management's forecast by comparing growth forecast to



actual growth to date and to IMF projections. Based on our procedures we are satisfied that the £25m impairment for Estonia is appropriate.

Where the recoverable amount has been assessed with reference to a valuation multiple, including for portfolio businesses, we assessed the appropriateness of the multiple by comparison to recent business disposals and to other third party information. With the support of our valuations experts, these multiples were found to be within a reasonable range. Based on our procedures we are satisfied that the £12m impairment for BrazilTechnology is appropriate.

The recoverable amount of a number of CGUs including UK Cash Solutions, Brazil Secure Solutions, China, Denmark, Greece, Democratic Republic of Congo, Guatemala and Zambia were found to be sensitive to reasonably possible changes in assumptions and we satisfied ourselves that this risk is appropriately highlighted in the disclosures in note 18.

As a result of our work, we determined that the quantum of the impairment recognised in 2015 was appropriate and adequate disclosure has been made.

*THIRD MOST OFTEN RANKED KAM IN THE BUSINESS SERVICES INDUSTRY: TAXATION AND REGULATION*

### **Uncertain tax positions and deferred tax assets**

The group operates in a complex multinational tax environment and is subject to a range of tax matters during the normal course of business including transaction related tax matters and transfer pricing arrangements.

Where the amount of tax payable is uncertain, the group establishes provisions based on management's judgement of the probable amount of the future liability. At 31 December 2015, the group has recognised provisions of 16m related to uncertain tax positions (2014: £22m).

In addition, the group has recognised 187m of deferred tax assets at 31 December 2015 (2014: £192m). The recognition of deferred tax assets involves judgement by management regarding the likelihood of the realisation of these assets. The expectation that these assets will be realised is dependent on a number of factors, including whether there will be sufficient taxable profits in future periods to support utilisation of these assets.

Refer to Audit Committee report on page 68 and to notes 13 and 34 of the group financial statements.

### **How our audit addressed the area of focus**

With the assistance of our local and international tax specialists, we evaluated and challenged management's judgements in respect of estimates of tax exposures and contingencies in order to assess the adequacy of the group's tax provisions.

In understanding and evaluating management's judgements, we considered the status of recent and current tax authority audits and enquiries, judgemental positions taken in tax returns and current year estimates and developments in the tax environment. Where appropriate, we also read appropriate documentation to understand the legal positions reached. From the evidence obtained, we considered the level of provisioning to be acceptable in the context of the group financial statements taken as a whole. However, we noted that the assumptions and judgements that are required to formulate the provisions mean that there is a broad range of possible outcomes.

In respect of the recoverability of deferred tax assets, we evaluated the management's assessment of whether there will be sufficient taxable profits in future periods to support the recognition of deferred tax assets. We evaluated the directors' future cash flow forecasts and the process by which they were prepared ensuring consistency of cash flows with those used for the purpose of goodwill impairment testing. Based on our procedures, future cash flow forecasts were both consistent with those used for impairment testing and supported the recoverability of the deferred tax assets recognised.

In light of 2015 being a first year audit, we deployed our transfer pricing specialists to evaluate the appropriateness of the group's transfer pricing methodology, to consider recent experience with relevant tax authorities and to identify areas of heightened risk to focus our audit testing. Our procedures provided us with evidence that the related tax provisions, and disclosure thereof are materially appropriate and complete.

*FOURTH MOST OFTEN RANKED KAM IN THE BUSINESS SERVICES INDUSTRY: PROVISIONS***Onerous contract provisioning**

Certain of the group's contracts are onerous and long-term in nature. These contracts can be complex and incorporate penalty and key performance indicator ("KPI") clauses in the event of non-compliance. The group is therefore required to make operational and financial assumptions to estimate future losses over periods that can extend beyond 20 years.

The prediction of future events contains inherent risk and a high degree of management judgement.

Variability of contract penalties, underlying delivery costs and customer disputes can put additional pressure on margins and on future contract profitability, giving rise to onerous contract provisions.

The group's onerous contract provisions at 31 December 2015 are £83m (2014: £47m). The income statement charge for onerous contracts in 2015 amounts to £65m.

Refer to Audit Committee report on page 68 and to note 33 of the group financial statements.

**How our audit addressed the area of focus**

Our global approach to testing complex contracts starts with an evaluation of management's process to identify and quantify onerous and at-risk contracts. Management focuses on the top 25 contracts by region and on contracts with margins of less than 3%. Our sampling of contracts focused our testing on higher risk and larger arrangements and enabled us to form an independent view as to whether management's process had identified all onerous and at-risk contracts. In addition, we performed scanning analytics on contract margins and investigated unusual or unexpected trends to check inclusion of relevant contracts in management's assessment. We subsequently evaluated the completeness of the group's onerous contract provisions, focusing in particular on the larger and more judgemental arrangements.

For each contract in our sample, we obtained and read the contractual terms and tested that the revenue recognised in the period was in accordance with the contractual terms and was supported by evidence of service delivery. We read and understood the contract penalty clauses and evaluated the completeness of penalties through discussions with contract managers and reading meeting minutes between G4S and the customer and customer correspondence.

We assessed each of the key assumptions used in management's forecasts to identify and quantify onerous contract provisions. Where possible, we obtained third party evidence to corroborate management's assumptions and assessed the appropriateness of the company's forecasts based on past performance. The group's policy is to include the benefits of performance improvement plans only where there is evidence of plans being achievable.

We critically challenged these benefits based on observable benefits achieved to date and the extent to which these plans are within the group's direct control.

We assessed the appropriateness of the discount rate used to present value the obligation and checked that the rate appropriately reflected the risk in the underlying cash flows.

We also challenged the recoverability of dedicated contract assets where the contract was identified as onerous. We are satisfied that assets directly attributable to delivering onerous contracts have been appropriately impaired at 31 December 2015.

Having examined management's analysis, our procedures focused on the Facilities Management and Care and Justice businesses in the UK and specifically on the legacy Compass and PFI contract which are long-term in nature, sensitive to changes in assumptions and have given rise to material changes in provisioning levels at year-end.

In respect of the Compass contract, we performed our own independent sensitivity analysis noting that the provision is most sensitive to changes in assumptions of user numbers and timing of contract termination. Our sensitivity analysis highlighted that small movements in these key assumptions have a significant impact on the year-end provision.

For both Compass and the legacy PFI contract, we also held discussions with group and regional legal counsel and read appropriate documentation to understand the legal position to evaluate customer claims and to assess any issues with the interpretation of contracts.

From the evidence obtained, we did not identify any incremental onerous contracts over and above the arrangements identified by management's own procedures. We considered the level of provisioning to be acceptable in the context of the group financial statements taken as a whole. However, we noted that the assumptions and judgements that are required to formulate the provisions mean that the range of possible outcomes is broad. We are satisfied with the group's related disclosures of these onerous contracts and the associated sensitivities in light of the underlying assumptions and accounting judgements made.

*FIFTH MOST OFTEN RANKED KAM IN THE BUSINESS SERVICES INDUSTRY: ACQUISITIONS***Accounting for the conditional sale of PR Newswire**

Refer to the Audit Committee Report (page 62); Accounting policies (page 135); and Note 6.4 of the Consolidated Financial Statements (page 135)

In December 2015, UBM announced the conditional sale of PR Newswire for \$841m. The assets and liabilities have been recognised as 'held for sale' on the 2015 statement of financial position and the results are classified as a discontinued operation in the income statement.

- We corroborated that the PR Newswire business met the IFRS 5 criteria to be recorded as held for sale and a discontinued operation.
- We confirmed that no impairment to the assets and liabilities was required based on the agreed sales price.
- We tested the extraction of the PR Newswire assets and liabilities that are disclosed as held for sale in the consolidated statement of financial position, from the Group's consolidated ledgers.
- We tested the reclassification of the PR Newswire income statement amounts from continuing to discontinued operations in the consolidated income statement and the impact on other disclosures within the consolidated financial statements.
- We tested that only those costs directly attributable to the disposal transaction were treated as part of discontinued operations.
- We considered whether it was appropriate to include the fair value movement on a deal contingent forward exchange contract, entered into in contemplation of this transaction completing, as an exceptional item within discontinued operations.

**What we concluded to the audit committee**

We concluded that the PR Newswire business disposal had met the IFRS 5 criteria to be recognised as held for sale and as a discontinued operation. The income statement and statement of financial position amounts, including the fair value of the deal-contingent forward exchange contract are appropriately recognised and disclosed.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the business services industry

KAM	Business services
Presentation and disclosure	G4S PLC (2)
Valuation of non-current assets	PAGEGROUP PLC
Employee benefits	CAPITA PLC
Internal controls	SAGE GROUP PLC
Business combinations	PLAYTECH PLC
Valuation	HAYS PLC
Impairment	RENTOKIL INITIAL PLC
Going concern	G4S PLC

### **SIC CODE 79 Amusement and recreation services**

Out of the 350 constituents of the FTSE 350, 17 are active in the amusement and recreation services industry. Our dataset contains information about 9 of these companies. The amusement and recreation services industry is slightly smaller than the average industry as the average industry size in the FTSE 350 is 19.44 firms.

#### **1) Number and length of KAM**

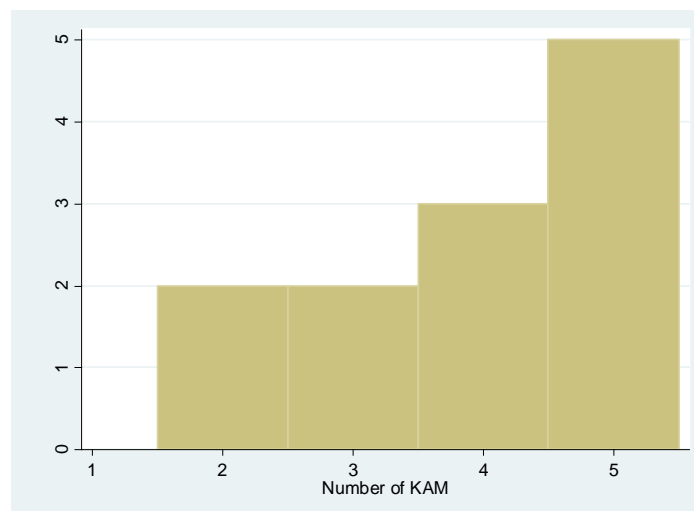
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	4	4.5	1.00	3	4	5	5	5
Number of KAM second year	4	4	1.41	2	3	4.5	5	5
Number of KAM third year	4	3.25	0.96	2	2.5	3.5	4	4
Number of KAM all years	12	3.92	1.16	2	3	4	5	5

**Table 1: The number of KAM in the amusement and recreation services industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 4. The median of KAMs decreases every year. It should be noted that the variance is relatively high (1.16), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAMs, some firms receive 5 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals the maximum amount of KAM: 5.



**Figure 1: Histogram of the number of KAM in the amusement and recreation services industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	4	1027	272	676	814	1076	1239	1279
Length second year	4	1159	235	919	989	1123	1329	1470
Length third year	4	1220	357	975	1004	1079	1436	1747
Length all years	12	1135	278	676	964	1092	1239	1747

**Table 2: Descriptive statistics of the length of the KAM section in the amusement and recreation services industry**

Table 2 shows that the number of words of the KAM section equals on average 1135 (median value of 1092 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 676 words and 1747 words).

In despite of the decrease in the number of KAM, the length shows a moderate increase over the 3 years as shown in Table 2. Given the number of KAM decreases over time (see Table 1), this illustrates that the average length of a KAM discussed in the amusement and recreation services increases from 200 in the first year to an average of 320 words in the third year.

Comparing the minimum and the maximum values seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 5, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the amusement and recreation services industry discloses 4 KAMs (i.e. 47 KAMS in total for the 12 firm year observations) with an average length of 1135 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is revenue recognition (27.66%) followed by valuation of non-current assets (14.89%), provisions (12.77%), goodwill (10.64%) and other (34.04%). The category 'Other' includes KAM such as acquisitions, taxation and regulation, impairment, ... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a revenue recognition KAM increases (from 22.22% to 30.77%), while the occurrence of valuation of non-current assets decreases from the first to the second year, but increases again in the third year (from 16.67% to 15.38%). Provisions become less important and decrease every year (from 16.67% to 15.38%).

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM decreases, the content of the KAM discussion section changes over time with more emphasis on revenue recognition and less emphasis on provisions.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	22.22%	31.25%	30.77%	27.66%
Second most disclosed	Valuation of non-current assets	16.67%	12.50%	15.38%	14.89%
Third most disclosed	Provisions	16.67%	12.50%	7.69%	12.77 %
Fourth most disclosed	Goodwill	11.11%	12.50%	7.69%	10.64 %
Fifth most disclosed	Other	33.33%	31.25%	38.47%	34.04%

**Table 3: Type of KAM most often disclosed in the amusement and recreation services industry**



As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM
Revenue recognition	23.08%	30.77%	30.77%	7.69%	7.69%
Valuation of non-current assets	57.14%	14.29%	0.00%	14.29%	14.29%
Provisions	16.67%	16.67%	16.67%	16.67%	33.33%
Goodwill	40.00%	20.00%	40.00%	0.00%	0.00%
Other	12.50%	31.25%	18.75%	31.25%	6.25%

**Table 4: Sequence of the five KAMs most often discussed in the amusement and recreation services industry**

Although valuation of non-current assets is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Similarly, although revenue recognition is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second or third KAM. Finally, important to note is that revenue recognition also appears as fourth or fifth KAM in the KAM section, which probably indicates that they are added to be complete (probably also explained by the ISA standards).

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (91.67%), only 8.33% use revenue. That revenue as the materiality base is an exception is also shown as there is only one firm year observation.

Looking at the materiality level used, Q1 shows that a materiality level of 5% is most often used in the amusement and recreation services with a maximum of 8.5%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	11	91.67	5.08	0.90	3.5	5	5	5.5	6.9
3	Revenue	1	8.33	1	/	1	/	/	/	1

**Table 5: The applied materiality level in the amusement and recreation services industry**

### 3) Summary of the main findings in the amusement and recreation services industry

In the amusement and recreation services industry the median number of KAM mentioned is 4 with an average length of 320 words per KAM. While the number of KAM decreases over the three years studied, the content of the KAM section changes with more emphasis on revenue recognition and less emphasis on provisions. Although valuation of non-current assets is relatively less important than revenue recognition, if mentioned, it appears first or second in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that amusement and recreation services is an industry with an equal amount of KAMs mentioned as the whole sample.

	Amusement and recreation services	Total sample
Number of KAM (median)	4	4
Length per KAM	320	305
Most common type	1. Revenue recognition	1. Revenue recognition
	2. Valuation of non-current assets (first rank)	2. Valuation of non-current assets
	3. Provisions	3. Taxation and regulation
	4. Taxation & regulation	4. Goodwill
	5. Goodwill	5. Provisions

**Table 6: Summary table of the main findings in the amusement and recreation services industry**

Appendix 1: Frequency table of the KAMs disclosed in the amusement and recreation services industry

KAM	Frequency	Percentage
Revenue recognition	13	27.66
Valuation of non-current assets	7	14.89
Provisions	6	12.77
Goodwill	5	10.64
Taxation and regulation	5	10.64
Other	4	8.51
Acquisitions	3	6.38
Employee benefits	2	4.25
Impairment	1	2.13
Valuation	1	2.13
Total	47	100

**Table 7: Frequency table of the different types of KAM (three year period) in the amusement and recreation services industry**

**Appendix 2: Example of the longest KAM in the amusement and recreation services industry**

Rank group plc (2016 – impairment, 555 words)

**Area of focus: Impairment of tangible and intangible assets and adequacy of property lease provisions**

Refer to the Audit Committee Report (page 57); Accounting policies (page 97); and note 12 of the Consolidated Financial Statements (page 116)

At 30 June 2016 the carrying value of tangible and intangible assets was £606.3 million, the majority of which relates to indefinite life intangible assets (primarily casino and other gaming licences) or goodwill.

In accordance with IAS 36 Impairment of Assets, management disclosed that in addition to the impairment charge of £0.9 million and impairment reversal of £1.4 million, a reasonably possible change in customer visits, win margins or spend per head could lead to impairments in other Cash Generating Units (CGU) where no impairment is currently recognised.

We focus on this area due to the significance of the carrying value of the assets being assessed and due to the level of management judgement required in the assumptions impacting the impairment assessment and the sensitivity of the impairment model. The main assumptions impacting the assessment and sensitivity of the model are future cash flows, growth rates applied to cash flows and discount rates. These assumptions are subjective and subject to management judgement about the future results of the business.

In addition, the Group holds a provision of £44.7 million for onerous lease provisions for both unoccupied properties and properties which are trading at a loss. We consider, as with impairment, there is a high level of management judgement required in the assumptions impacting the assessment and the sensitivity of the model. This is primarily the amount of sub-let income and period for which sub-let income can be obtained. We therefore consider there is a higher likelihood that a material misstatement could arise as there is a risk that these provisions may be incorrectly valued.

**Our response**

- We updated our understanding of management's annual impairment testing process.
- We ensured that the methodology of the impairment exercise continues to comply with the requirements of IFRS as adopted by the European Union, including evaluating management's assessment of indicators of impairment against indicators of impairment specified within IAS 36.
- We assessed the forecasts underlying the impairment review and agreed to budgets approved by the Board, reviewing these against actual performance and historic accuracy of forecasting. We also performed sensitivity analysis on earnings multiples and growth rates applied to cash flows to determine the extent of headroom for each CGU.
  
- We agreed other key assumptions such as discount rates to supporting evidence and corroborated these to industry averages/trends with the assistance of EY internal experts.
- We compared the individual CGU projections to historic performance and observable trends and corroborated the reasons for deviations to third party evidence as appropriate.
- For property lease provisions we understood management's process for identifying onerous leases and ensured the appropriate factors had been considered, including the recoverability of sub-let income, and determined whether appropriate provision had been made. This also included an assessment of whether the appropriate discount rate had been applied.

-We checked underlying calculations and agreed key inputs to third party evidence including lease agreements.

**What we concluded to the audit committee**

The net impairment reversal of £0.5 million and onerous lease charge of £1.5 million is appropriately recognised. We highlighted that a reasonably possible change in certain key assumptions underpinning the forecasts for certain CGUs could lead to additional impairment. Sensitivity to changes in certain assumptions have been disclosed within note 12 to the annual report and accounts.

We concluded that the property provisions recognised are appropriate.

Appendix 3: Longest KAMs of the five most common KAMs in the amusement and recreation services industry

*FIRST RANKED KAM IN THE AMUSEMENT AND RECREATION SERVICES INDUSTRY: REVENUE RECOGNITION*

**Recognition of Virtual Print Fee ("VPF") income (£11.1m)**

Refer to page 49 (Audit committee report), page 95 (accounting policy).

The risk: VPF income is recognised on an accruals basis, dependent on the number and type of screenings made using digital display equipment. The terms of the VPF contract in the UK that determine when revenue can be recognised include requirements regarding the number, type, timing and overlap of screenings; as such the calculation of the accrual is complex. This complexity is enhanced by the large volume of screening data and the limitations of the Group's information systems, which require manual intervention to fully reflect the contract terms.

Further, a third party is involved in agreeing the level of income due to the Group. The need for clarification on interpretation, data mismatches and processing delays have historically led to differences between the third party and the Group's income calculations. This results in a six month gap between the income being recognised and the balances being fully reconciled with the third party supplier. This delay means the size of the year end accrual is significant.

There is an added complexity in this year as the maximum eligible amount that can be earned under the contract has almost been reached. This requires the Group to agree the final amount due by demonstrating both the total amount eligible to be reclaimed per screen under the terms of the agreement and the amount previously reclaimed. There is a risk that the amount recognised may differ from the final third party calculation. VPF income is therefore deemed to remain one of the Group's key judgement areas.

**Our response**

Our principal audit procedures included: testing the Group's controls over the VPF data collection and recognition process; assessing, in comparison to information received from the third party supplier, the accuracy and detail of the Group's screening information; and considering the accuracy of the prior period accrued income by reference to receipts during the year. We considered the appropriateness of the level of income recognised by reference to the terms of the VPF agreement and by calculating the expected income.

In relation to the finalisation of the contract, we inspected supporting documentation, including correspondence with the third party supplier and the terms of the original contract, to compare the amounts under discussion with the total revenue expected to be recognised over the life of the contract. As final agreement over the total amount due under the contract has not yet been reached, we also considered the adequacy of the disclosure over the degree of estimation involved in determining the income accrued pending final agreement and the period remaining revenue under the contract is expected to be recognised.

**Carrying value of non-current assets £2,475 million**

Refer to page 73 (Audit Committee Report) and pages 129 to 131 (accounting policy and financial disclosures).

The risk -A history of business combinations and the capital intensive nature of the business model means that the Group has significant balances of goodwill, intangible assets and property, plant and equipment. There is a risk that the future performance of these assets may lead to their carrying values not being recoverable in full. When impairment testing is required there are inherent uncertainties in estimating the value of assets to the business through discounted cash flows. These uncertainties arise principally in the inputs used in forecasting future cash flows (for example expected changes in visitation at existing attractions, particularly where there have been recent changes in the overall offering, new and ongoing promotions or planned customer experience improvements).

Uncertainty arises partly due to the unpredictable impact of factors such as competition, the weather, and the political and economic environment on trading performance but also as the Group's new attractions are often in unproven locations. Additionally and specifically in relation to the Resort Theme Parks goodwill, events during the year at Afton Towers have meant that previous trading patterns have been disrupted and greater uncertainty exists over forecasting visitor numbers. The reduced EBITDA since June 2015 and the risk that a return to previous levels of performance may not be achieved immediately has reduced valuation headroom. This increases the risk over this asset's valuation. There is also uncertainty around the most appropriate rate at which to discount these expected future cash flows.

**Our response**

Our audit procedures included, amongst others, an analysis of the Group's previous ability to forecast cash flows accurately and challenging the reasonableness of current forecasts. These current forecasts include assumptions such as the expected change in visitation and revenues arising from activities such as new and ongoing promotions and customer experience improvements, as well as the response to specific events, including the accident at Alton Towers. Our challenge of the forecasts included an assessment of the Group's assumptions around these activities, including a comparison of expected changes against the past results of similar activities carried out by the Group. In addition, specific to Alton Towers, we considered historic peer group data for incident recovery rates and their applicability to Merlin's business model and visitor market. We corroborated major assumed cost reductions to detailed plans and wherever possible contractual agreements. This allowed us to assess the level of the risk inherent in the current cash flow forecasts.

The data used by the Group to determine its earnings multiple and calculate its discount rates was benchmarked against market data, including publicly available analysts' reports and peer comparisons. We were supported by our valuation specialists in this work. We performed a sensitivity analysis of the long term growth rate, discount rates and forecast cash flows to show the effect of possible downside scenarios and considered the resulting headroom across the valuations, as well as the appropriateness of the related disclosures. We also assessed whether the Group's disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions appropriately reflected the risks inherent in the valuation of non-current assets.

*THIRD MOST OFTEN RANKED KAM IN THE AMUSEMENT AND RECREATION SERVICES INDUSTRY: TAXATION AND REGULATION*

### **Indirect tax risk exposures and claims**

Refer to the Audit Committee Report (page 57); Accounting policies (page 97); and notes 30 and 31 of the Consolidated Financial Statements (pages 134 and 135).

Indirect tax is a complex area in the betting and gaming industry and the Group has a number of claims and enquiries with HMRC. The Group is required to consider the disclosure in the annual accounts of certain contingent assets and contingent liabilities and the appropriateness of their provisions in respect of these ongoing issues. We focus on this to ensure that all changes to legislation and rates levied have been correctly applied and due to the highly judgemental nature of many of the ongoing claims and disclosure requirements we have identified this as a significant risk for the audit.

### **Our response to the risk**

-We reviewed and corroborated the key assumptions made by management in respect of uncertain indirect tax positions ensuring developments in the period have been taken into account and that all possible outcomes have been assessed.

-We reviewed correspondence received from tax authorities during the period in order to assess the completeness of uncertain tax positions and to corroborate management's position. We have involved our indirect taxation specialists in assessing the implications of correspondence received from tax authorities.

-We employed tax specialists to assess the technical support for indirect tax submissions and to perform a review for completeness of effected changes in indirect tax legislation to ensure they had been appropriately reflected by the Group.

-We updated our understanding of the process for preparing the partial exemption calculation and tested the partial exemption calculation using indirect tax specialists.

We conclude that the positions taken by management are appropriate and accurately reflected in the financial results.



*FOURTH MOST OFTEN RANKED KAM IN THE AMUSEMENT AND RECREATION SERVICES INDUSTRY: PROVISIONS***Onerous lease provisions (£5.6m)**

Refer to page 49 (Audit committee report), page 95 (accounting policy) and page 120 (financial disclosures).

The risk: The Group provides for an onerous lease when it considers that the unavoidable cost of the lease obligation from operating a cinema is in excess of the expected economic benefits, but where continuing to operate the cinema is rational because it contributes towards mitigating the impact of that unavoidable cost. There is a risk that the provision may be misstated if inappropriate estimates and assumptions are applied in the valuation model.

The onerous lease provision is revisited annually using a valuation model to determine whether any further provision or release is required. Estimating future operating cash flows at a cinema level requires consideration of current and expected market conditions both nationally and locally. The value of the provision is particularly sensitive to the assumptions used in relation to the discount rate and to forecast revenues. The latter is mainly because: the Group has no direct control over the films released for distribution; there is limited visibility over the release schedule more than 12 months into the future; and there can be variation in performance of the films over the diverse geographic footprint of the Group.

**Our response**

Our principal audit procedures included challenging the operating cash flow forecast of each cinema for which a provision has been made by considering the forecast cash flows against historical cash flow trends and assessing the basis for and impact of both expected changes in market conditions and the future plans of the business. We also considered the appropriateness and accuracy of the valuation model, including assessing the key assumptions driving revenue growth and the discount rate against our internal and external benchmark data; and considered likely sensitivities and their quantum by adjusting the input assumptions. We further considered the adequacy of the Group's disclosure around the degree of estimation involved in arriving at the provision and the level of sensitivity of the provision to changes in the input assumptions.

*FIFTH MOST OFTEN RANKED KAM IN THE AMUSEMENT AND RECREATION SERVICES INDUSTRY: GOODWILL***Impairment of goodwill**

The Group has goodwill of £1,145.8 million which is tested annually for impairment against value in use of the Group's CGUs - Retail, Online, Stadia, US and Australia.

The annual impairment test is a complex process requiring significant management judgement and is based on key assumptions about future profitability and cash flows, selecting appropriate discount and long-term growth rates, which are disclosed in note 12 of the Group financial statements.

Our risk is focused on the sensitivity to those key assumptions used in the Group's impairment review, and the ultimate recoverability of goodwill.

**How the scope of our audit responded to the risk**

Our work focused on evaluating the design and implementation of key controls in this area and challenging the following key assumptions used by management in conducting their impairment review:

- agreement of cash flow assumptions to board-approved budgets,
- validating the reasonableness of the cash flow forecasts by comparing value in use to the Group's market value,
- assessing management's historical budgeting accuracy; challenge of short-term growth rates used in the Group's and component's forecasts by reference to current performance and plans,
- consideration of the appropriateness of long-term growth rates by comparison to the historical average long-term growth rates achieved in the country of operation,
- using our internal valuation specialists to independently calculate appropriate discount rates for comparison with those used by management, and
- we have sensitized management's assumptions to reflect reasonably possible future alternative scenarios

From the result of our procedures, we did not identify any impairment of goodwill for the Group's CGUs.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the amusement and recreation services industry

KAM	Amusement and recreation services
Goodwill	WILLIAM HILL PLC
Impairment	RANK GROUP PLC

### **SIC CODE 80 Health care**

Out of the 350 constituents of the FTSE 350, 9 are active in the health care industry. Our dataset contains information about 8 of these companies. The health care industry is one of the smallest industries in the FTSE 350.

#### **1) Number and length of KAM**

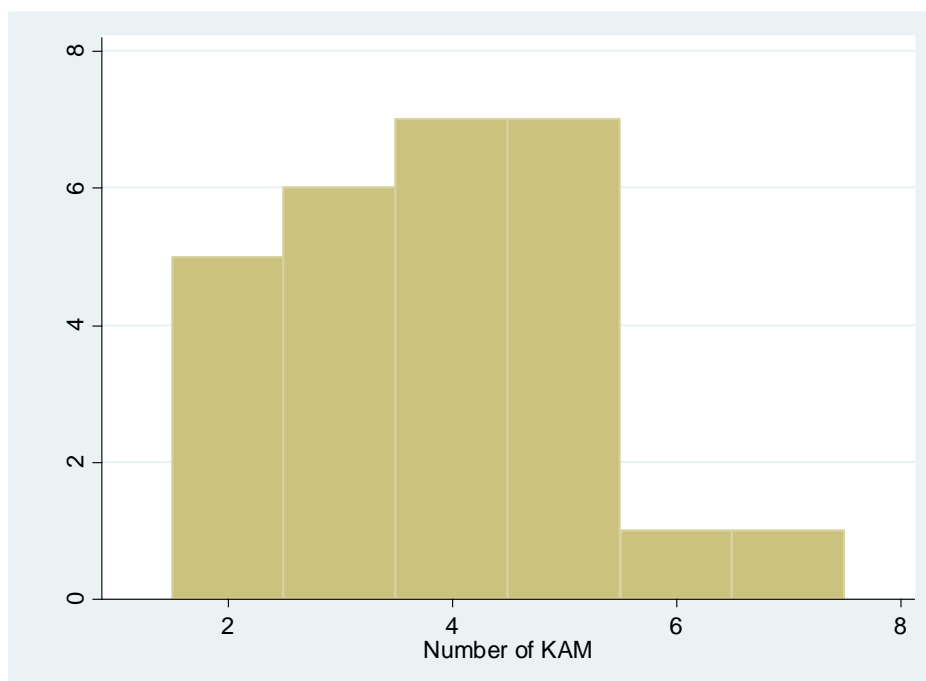
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	9	3.78	0.97	2	3	4	4	5
Number of KAM second year	9	4	1.32	2	3	4	5	6
Number of KAM third year	9	3.78	1.72	2	2	4	5	7
Number of KAM all years	27	3.85	1.32	2	3	4	5	7

**Table 1: The number of KAM in the health care industry**

Looking at the total sample period of 3 years we observe that the median number of KAM equals 4. The median is constant over time. It should be noted that the variance is relatively high (1.32), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAM, some firms receive up to 7 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 4 or 5. It should be noted that the amount of reports with three, four or five KAMs is almost equal.



**Figure 1: Histogram of the number of KAM in the health care industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	9	677	291.20	315	539	599	763	1262
Length second year	9	1139	539.37	393	866	914	1270	2109
Length third year	9	1486	805.60	622	1043	1383	1542	3422
Length all years	27	1101	655.30	315	622	914	1383	3422

**Table 2: Descriptive statistics of the length of the KAM section in the health care industry**

Table 2 shows that the number of words of the KAM section equals on average 1101 (median value of 914 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 315 words and 3422 words).

Despite the number of KAM staying constant, the length shows a big increase over the three years. Table 2 shows that the average length of the KAM section increases every year. Given the number of KAM is remaining stable (see Table 1), this illustrates that the average length of a KAM discussed in the health care industry increases from 180 in the first year to an average of 393 words in the third year.

Comparing the minimum and the maximum values of KAM (315 versus 3422 words) however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 7, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the health care industry discloses 4 KAMs (i.e. 104 KAMS in total for the 27 firm year observations) with an average length of 1101 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAMs most often disclosed are revenue recognition (22.12%), followed by taxation and regulation (19.23%), goodwill (12.50%) and acquisitions (10.58%). The category 'Other' includes KAM such as provisions, impairment, employee benefits,... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of a taxation and regulation KAM increases (from 14.71% to 23.53%), while the occurrence of revenue recognition (23.53%), goodwill (11.76%) and acquisitions (8.82%) remains stable.

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM remains constant, the content of the KAM discussion section changes over time with more emphasis on taxation and regulation.

	KAM	First year	Second year	Third year	All years
Most disclosed	Revenue recognition	23.53%	19.44%	23.53%	22.12%
Second most disclosed	Taxation and regulation	14.71%	19.44%	23.53%	19.23%
Third most disclosed	Goodwill	11.76%	13.89%	11.76%	12.50%
Fourth most disclosed	Acquisitions	8.82%	13.89%	8.82%	10.58%
Fifth most disclosed	Other	41.18%	33.34%	32.36%	35.57%

**Table 3: Type of KAM most often disclosed in the health care industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM
Revenue recognition	39.13%	30.43%	17.39%	10.34%	0.00%	0.00%	0.00%
Taxation and regulation	0.00%	0.00%	55.00%	30.00%	5.00%	5.00%	5.00%
Goodwill	23.08%	38.46%	7.69%	15.38%	15.38%	0.00%	0.00%
Acquisitions	63.64%	0.00%	18.18%	0.00%	18.18%	0.00%	0.00%
Other	21.62%	40.54%	10.81%	13.51%	10.81%	2.70%	0.00%

**Table 4: Sequence of the five KAMs most often discussed in the health care industry**

Although acquisitions is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Similarly, although revenue recognition is most often discussed in the KAM section (see Table 3) it is most likely discussed as the first or second KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (88.89%), only 11.1% uses equity.

Looking at the materiality level used, Q1 shows that a materiality percentage of 5% is most often applied in the health care industry with a maximum of 8%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	24	88.89	5.29	1.00	4	5	5	5	8
2	Equity	3	11.11	1	0.00	1	1	1	1	1

**Table 5: The applied materiality level in the health care industry**

### 3) Summary of the main findings in the health care industry

In the health care industry the median number of KAM mentioned is 4 with an average length of 286 words per KAM. While the number of KAM remains constant over the three years studied, the content of the KAM section changes with more emphasis on taxation and regulation. Although acquisitions are relatively less important, if mentioned the KAM appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average materiality percentage equals 5%.

From the comparison with the total sample, we observe that health care is an industry with an equal amount of KAMs mentioned as the whole sample. However the type of KAM differs, acquisitions occur in the top 5 of the health care industry while it does not for the whole sample, where goodwill is one of the top 5 KAMs mentioned. This can probably be explained by the fact that acquisitions in the health care industry are more recent.

	Health care	Total sample
Number of KAM (median)	4	4
Length per KAM	286	305
Most common type	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Taxation &amp; regulation</li> <li>3. Goodwill</li> <li>4. Acquisitions (first rank)</li> <li>5. Valuation of non-current assets</li> </ol>	<ol style="list-style-type: none"> <li>1. Revenue recognition</li> <li>2. Valuation of non-current assets</li> <li>3. Taxation &amp; regulation</li> <li>4. Goodwill</li> <li>5. Provisions</li> </ol>

**Table 6: Summary table of the main findings in the health care industry**

## Appendix 1: Frequency table of the KAMs disclosed in the health care industry

KAM	Frequency	Percentage
Revenue recognition	23	22.12
Taxation and regulation	20	19.23
Goodwill	13	12.50
Acquisitions	11	10.58
Valuation of current assets	11	10.58
Valuation of non-current assets	10	9.62
Employee benefits	6	5.77
Provisions	4	3.85
Internal controls	2	1.92
Valuation	2	1.92
Impairment	1	0.96
Other	1	0.96
Total	104	100

**Table 7: Frequency table of the different types of KAM (three year period) in the health care industry**



**Appendix 2: Example of the longest KAM in the health care industry**

Dechra pharmaceuticals plc (2016 – Acquisitions, 854 words)

**Area of focus**

Assessment of the accounting position adopted on the opening balance sheet accounting for the Genera, Brovel and Putney acquisitions

Refer to the Audit Committee Report on page 74, the critical accounting estimates and judgements in note 1 (b) to the accounts on page 112, and note 31 (Acquisitions).

The Group completed the following acquisitions during the year: Genera d.d. on 21 October 2015; Laboratorios Brovel S.A. de C.V. on 13 January 2016; and Putney Inc. on 22 April 2016.

We focused on this area because the accounting for business combinations including the respective provisional opening balance sheet position is inherently judgemental. IFRS 3 (revised) requires that consideration is given to the existence and measurement of separable identifiable intangible assets that have been acquired as part of each respective acquisition agreement. For both Genera d.d. (Genera) and Putney Inc. (Putney), significant value has been attributed to the brand and product portfolio, the recognition of which is dependent on cash flow forecasts including future business growth, product development and the application of an appropriate discount rate, all of which are subjective.

The land and property acquired was restated to fair value. This required the use of assumptions including building construction costs and the discounted land values within the valuation methodology.

The accounting standards state that acquired inventory should be recognised at fair value which is equal to the selling price less costs to sell. This has resulted in value uplifts to the acquired inventory held in Genera, Putney and Laboratorios Brovel S.A. de C.V. (Brovel). The appropriateness of the fair value adjustments are dependent on the existence and quality of inventory held at the acquisition date and the calculation of selling costs.

We have focused on the completeness of liabilities recorded at the respective acquisition date. As the recognition of obligations can be subject to the extent of information available this can give rise to judgement being exercised.

The calculation of deferred tax liabilities arising on the identifiable intangible assets is reliant on the correct application of local tax rates. The measurement of deferred taxes is dependent on the understanding and application of local tax rules, with the recognition of any deferred tax assets being judgemental based on the Directors' evaluation of recoverability.

**How our audit addressed the area of focus**

**Intangible assets** - We obtained the cash flow forecasts supporting the intangible assets identified and agreed that these were consistent with those approved by the Board as part of the acquisition process. For sales volumes and margin data we tested that the relevant assumptions were consistent to the historical performance of each of the acquired businesses. We assessed the validity of new products being made available for sale through independent research as to the accessibility and marketability of similar products. We corroborated that development costs have been appropriately included based on actual costs previously incurred on comparable products developed by the Group.

We engaged our valuation specialists who benchmarked within a reasonable range that the growth assumptions were in line with industry expectation and the specific geographical locations in which the business operates. Our valuation specialists also agreed that the discount rates were consistent to those applied by companies of comparable size and within the relevant industry.

**Land and buildings** - We engaged our valuation specialists who agreed that both key assumptions were within a reasonable range. The building construction costs were agreed as consistent with average data available for industrial property development within Central and Eastern European countries and the land discount was compared with the value of sites sold which are similar in size and nature.

Inventory - We have corroborated the respective selling costs by agreeing to sales invoices and agreeing that these costs have been accurately included within the overall calculations performed. We attended and undertook physical inventory counts at key locations validating that inventory was being held and accurately recorded. As part of our physical attendance we surveyed the aging and quality of specific inventory items and evaluated the local obsolescence policies which adequately aligned to the inventory profiles observed.

Liabilities - We considered the completeness of liabilities through our knowledge of the business, by making enquiries of the Directors, examining correspondence with legal counsel and reading the respective sale and purchase agreements. We performed substantive procedures on material purchase invoices and bank payments post acquisition date and confirmed that these were correctly recorded.

Taxation - We recalculated the deferred tax liabilities arising on the acquired intangibles assets and agreed that relevant tax rates have been used.

We read the prior year tax computations and available correspondence from the respective tax authorities and agreed that all known significant obligations and threats have been suitably considered.

In respect of Putney, the Directors evaluated operating losses which are available to be utilised in future periods. We agreed the quantum and nature of the losses to prior period tax computations. We read the local tax rules and verified the accuracy of the calculation as to the losses which can be recognised in line with the rules. We recalculated the associated deferred tax asset and agreed the recognition of this by confirming the basis of recoverability is consistent with Board approved forecasts.

**Appendix 3: Longest KAMs of the five most common KAMs in the health care industry****FIRST RANKED KAM IN THE HEALTH CARE INDUSTRY: REVENUE RECOGNITION**

**Revenue recognition, including the timing of revenue recognition and the determination of whether the Group is acting in the capacity of an agent rather than principal (The Group has revenue of \$880.9m, 2014: \$613.9m).**

Refer to the Audit Committee Report (page 54); Accounting policies (pages 109 to 110); and Note 5 and 7 of the Consolidated Financial Statements (starting on pages 117 and 123 respectively).

The Group has a number of revenue streams relating to its Healthcare and Distribution segments including clinic revenues, insurance claims, over-the-counter sales, pharmacy sales and sales of goods. There is a risk of improper revenue recognition, particularly with regard to cut-off at period end dates, in the healthcare business, given the diversity of the Group's healthcare operations, and in the distribution business. Furthermore, there is a risk that management may incorrectly determine whether the Group is acting as principal or agent in certain arrangements such as distribution agreements with key suppliers and revenue sharing agreements with doctors.

The risk has increased in the current year due to the acquisitions which have resulted in new revenue streams for the Group.

**Our response to the risk**

We relied upon the controls tested over revenue recognition, including the timing of revenue recognition.

We performed analytical review procedures and performed cut-off testing procedures (by selecting a sample of transactions either side of year-end) to check that revenue had been recognised in the appropriate accounting period.

We performed procedures on contractual arrangements in respect of new and one-off fee income and considered the appropriateness of the accounting through verification to legal agreements and vouching the amounts recognised to invoices and cash receipts.

We tested a sample of new distribution agreements entered into during the year and revenue sharing contracts with doctors in newly acquired businesses to verify that the Group's determination that they are acting as a principal rather than an agent is appropriate.

We checked the Group's adherence to their revenue recognition policies and we agreed that these policies are in accordance with IFRSs as adopted by the European Union.

We performed full and specific scope audit procedures over this risk area in 13 locations.

**What we concluded to the audit committee**

Based on the audit procedures performed, we are satisfied that revenue recognition is appropriate and that the Group has appropriately adhered to their revenue recognition policies, including the determination of whether the Group is acting as agent rather than as principal.

*SECOND MOST RANKED KAM IN THE HEALTH CARE INDUSTRY: TAXATION AND REGULATION***Litigation**

Refer to Notes 3, 29 and 45 in the Group financial statements.

The pharmaceuticals industry is heavily regulated which increases inherent litigation risk. The Group is engaged in a number of legal actions, including product liability, anti-trust and related private litigation, of which the most significant are disclosed in Notes 29 and 45.

We focused on this area as the eventual outcome of claims is uncertain and the positions taken by the directors are based on the application of material judgement and estimation. Accordingly, unexpected adverse outcomes could significantly impact the Group's reported profit and balance sheet position.

During the year, the most significant increase to the Group's litigation provisions was in respect of the Paxil product liability referred to in Notes 29 and 45 which was reassessed following unsuccessful mediation with plaintiffs giving rise to a subsequent revision of management's best estimate of settling these claims. This increase was more than offset by utilisation of existing provisions of £428 million.

At 31 December 2015, the Group held provisions of £352 million in respect of legal actions (31 December 2014 — £520 million).

**How our audit addressed the area of focus**

We discussed the status of significant known actual and potential litigation with in-house legal counsel. We obtained and substantively tested evidence to support the decisions and rationale for provisions held or decisions not to record provisions, including correspondence with legal counsel and other counterparties to litigation. We also monitored and considered external information sources to identify potential legal actions.

We developed an independent expectation of the litigation provisions based on product litigation history and other available evidence to challenge the valuation and completeness of the provisions recognised by the Group.

We obtained confirmations from external legal counsel to confirm our understanding of settled and outstanding litigation and asserted claims.

We evaluated significant adjustments to legal provisions recorded during the year to determine if they were indicative of management bias. In respect of the increase in the provision for Paxil product liability litigation, we obtained sufficient evidence to conclude that this increase was reasonable, including review of external legal advice.

As disclosed in Notes 29 and 45 to the Group financial statements, the eventual outcome of legal proceedings is dependent on the outcome of future events and the position taken by the Group is inherently judgemental. We found that in the context of the Group financial statements taken as a whole the judgements made by management were reasonable and the disclosures made in respect of these provisions and contingent liabilities were appropriate.

THIRD MOST OFTEN RANKED *KAM* IN THE HEALTH CARE INDUSTRY: GOODWILL

### **Carrying value of goodwill and intangible assets**

Refer to Notes 3, 18 and 19 in the Group financial statements.

The Group has £16.0 billion of intangible assets (31 December 2014 —£7.8 billion), comprising significant licenses, patents and acquired trade marks (and excluding computer software). In addition, the Group has £5.2 billion of goodwill at 31 December 2015 (31 December 2014 —£3.7 billion). The Group recognised impairments to these intangible assets amounting to £206 million during the year.

The carrying values of goodwill and intangible assets are contingent on future cash flows and there is risk if these cash flows do not meet the Group's expectations that the assets will be impaired. The impairment reviews performed by the Group contained a number of significant judgements and estimates including revenue growth, the success of new product launches, patent expiry dates, profit margins, cash conversion, terminal values and discount rate. Changes in these assumptions might lead to a change in the carrying value of intangible assets and goodwill.

During the year, the Group reduced its number of individual cash generating units ("CGUs") for goodwill impairment testing purposes from eight to four, comprising Global Pharmaceuticals, Consumer Healthcare, Vaccines and ViiV Healthcare. This exercise was undertaken to align the CGUs to the Group's operating segments which were changed following the Group's restructuring following the Novartis transaction. Through this exercise, Vaccines has been treated as a separate CGU for the first time and the Global Pharmaceuticals CGU aggregates pharmaceuticals businesses previously separated into the US, Europe, Japan, Emerging Markets and Other.

We focused on acquired intangible assets, as these are the most significant individually and in aggregate, and a number have indefinite lives, including the most significant of the intangible assets acquired from Novartis. The Group has also recognised goodwill from a number of its acquisitions, including the three-part transaction with Novartis.

### **How our audit addressed the area of focus**

Deploying our valuations specialists, we obtained the Group's impairment analyses and tested the reasonableness of key assumptions, including profit and cash flow growth, terminal values, the impact of the expiry of patents, potential product obsolescence and the selection of discount rates. We challenged management to substantiate its assumptions, including comparing relevant assumptions to industry and economic forecasts.

We interrogated the integrity of supporting calculations and we corroborated certain information with third party sources, including expectations of performance of certain assets and components of the business. We obtained and evaluated management's sensitivity analyses to ascertain the impact of reasonably possible changes in key assumptions and we performed our own independent sensitivity calculations to quantify the downside changes to management's models required to result in impairment.

As a result of our work, we determined that the quantum of impairment recognised in 2015 was appropriate. For those intangible assets, including goodwill, where management determined that no impairment was required, we found that these judgements were supported by reasonable assumptions that would require unreasonable downside changes before any additional material impairment was necessary.

In respect of the aggregation of CGUs, we confirmed that this is the lowest level at which management monitors goodwill for internal purposes, that it is consistent both with the way in which the Group's leadership team is structured and with how the Group's results and financial position are reported to the CET and that no CGU for goodwill impairment testing purposes is larger than any of the Group's new operating segments.

*FOURTH MOST OFTEN RANKED KAM IN THE HEALTH CARE INDUSTRY: ACQUISITIONS***Assessment of the accounting position adopted on the opening balance sheet accounting for the Genera, Brovel and Putney acquisitions.**

Refer to the Audit Committee Report on page 74, the critical accounting estimates and judgements in note 1 (b) to the accounts on page 112, and note 31 (Acquisitions).

The Group completed the following acquisitions during the year: Genera d.d. on 21 October 2015; Laboratorios Brovel S.A. de C.V. on 13 January 2016; and Putney Inc. on 22 April 2016.

We focused on this area because the accounting for business combinations including the respective provisional opening balance sheet position is inherently judgemental.

IFRS 3 (revised) requires that consideration is given to the existence and measurement of separable identifiable intangible assets that have been acquired as part of each respective acquisition agreement. For both Genera d.d. (Genera) and Putney Inc. (Putney), significant value has been attributed to the brand and product portfolio, the recognition of which is dependent on cash flow forecasts including future business growth, product development and the application of an appropriate discount rate, all of which are subjective.

The land and property acquired was restated to fair value. This required the use of assumptions including building construction costs and the discounted land values within the valuation methodology.

The accounting standards state that acquired inventory should be recognised at fair value which is equal to the selling price less costs to sell. This has resulted in value uplifts to the acquired inventory held in Genera, Putney and Laboratorios Brovel S.A. de C.V. (Brovel). The appropriateness of the fair value adjustments are dependent on the existence and quality of inventory held at the acquisition date and the calculation of selling costs.

We have focused on the completeness of liabilities recorded at the respective acquisition date. As the recognition of obligations can be subject to the extent of information available this can give rise to judgement being exercised.

The calculation of deferred tax liabilities arising on the identifiable intangible assets is reliant on the correct application of local tax rates. The measurement of deferred taxes is dependent on the understanding and application of local tax rules, with the recognition of any deferred tax assets being judgemental based on the Directors' evaluation of recoverability.

**How our audit addressed the area of focus**

**Intangible assets** - We obtained the cash flow forecasts supporting the intangible assets identified and agreed that these were consistent with those approved by the Board as part of the acquisition process. For sales volumes and margin data we tested that the relevant assumptions were consistent to the historical performance of each of the acquired businesses. We assessed the validity of new products being made available for sale through independent research as to the accessibility and marketability of similar products. We corroborated that development costs have been appropriately included based on actual costs previously incurred on comparable products developed by the Group.

We engaged our valuation specialists who benchmarked within a reasonable range that the growth assumptions were in line with industry expectation and the specific geographical locations in which the business operates. Our valuation specialists also agreed that the discount rates were consistent to those applied by companies of comparable size and within the relevant industry.

**Land and buildings** - We engaged our valuation specialists who agreed that both key assumptions were within a reasonable range. The building construction costs were agreed as consistent with average data available for industrial property development within Central and Eastern European countries and the land discount was compared with the value of sites sold which are similar in size and nature.

Inventory - We have corroborated the respective selling costs by agreeing to sales invoices and agreeing that these costs have been accurately included within the overall calculations performed. We attended and undertook physical inventory counts at key locations validating that inventory was being held and accurately recorded. As part of our physical attendance we surveyed the aging and quality of specific inventory items and evaluated the local obsolescence policies which adequately aligned to the inventory profiles observed.

Liabilities - We considered the completeness of liabilities through our knowledge of the business, by making enquiries of the Directors, examining correspondence with legal counsel and reading the respective sale and purchase agreements. We performed substantive procedures on material purchase invoices and bank payments post acquisition date and confirmed that these were correctly recorded.

Taxation - We recalculated the deferred tax liabilities arising on the acquired intangibles assets and agreed that relevant tax rates have been used.

We read the prior year tax computations and available correspondence from the respective tax authorities and agreed that all known significant obligations and threats have been suitably considered.

In respect of Putney, the Directors evaluated operating losses which are available to be utilised in future periods. We agreed the quantum and nature of the losses to prior period tax computations. We read the local tax rules and verified the accuracy of the calculation as to the losses which can be recognised in line with the rules. We recalculated the associated deferred tax asset and agreed the recognition of this by confirming the basis of recoverability is consistent with Board approved forecasts.



*FIFTH MOST OFTEN RANKED KAM IN THE HEALTH CARE INDUSTRY: VALUATION OF CURRENT ASSETS***Accounting for major complex transactions**

(The Group recognised goodwill of \$345.1m and intangible assets of \$74.8m in respect of the acquisitions made in the current year. There were no acquisitions in the prior year.)

Refer to the Audit Committee Report (page 54); Accounting policies (pages 111 to 113); Significant Accounting Judgements and Estimates (Note 23) and Notes 5, 18, 36 and 37 of the Consolidated Financial Statements (starting on pages 117, 133, 145 and 146 respectively).

The Group made a number of significant acquisitions during the year including the Luarmia S.L group of companies, Americare Group, Dr Sunny Healthcare Group and ProVita International Medical Center LLC. The contractual arrangements for such transactions can be complex and require management to apply judgement in determining whether a transaction represents an acquisition of an asset or a business combination.

There is a risk that the estimates and judgements made in the recognition of an acquisition as a business combination may be inappropriate and the valuation of the assets and liabilities acquired may be misstated.

The complexity of the multiple contractual arrangements in respect of certain acquisitions and related services, and the different legal environments in which acquisitions have been undertaken, may lead to inappropriate judgements as to the basis of accounting.

Furthermore, there is a risk that these acquisitions may be recognised before the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

This is a new risk in the current year given that there were a number of such transactions in the current year and none in the prior year.

**Our response to the risk**

We obtained and reviewed the sale and purchase agreements entered into for the acquisitions which took place in the year and other relevant documentation to understand the terms and conditions of the agreements.

We assessed the judgements applied in determining whether acquisitions in the year represented an acquisition of an asset or a business combination. This involved assessing whether or not the entities and the assets acquired constitute the carrying

on of a business, i.e., whether there are inputs and processes applied to those inputs that have the ability to create outputs.

Where transactions met the definition of a business combination we audited the Group's assessment of the assets and liabilities acquired and the allocation of the purchase consideration to these and the resultant goodwill or gain on bargain purchase recognised by performing the following procedures:

We assessed the appropriateness of the recognition of intangible assets and consideration of their valuation inputs.

We verified that the consideration transferred, and where relevant contingent consideration, in respect of each transaction was appropriately calculated in accordance with contractual arrangements.

We assessed management's judgements in respect of what arrangements should be accounted for as part of the business combination and those that should be accounted for separately from the business combination.



We assessed whether the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee as at the date upon which the acquisitions were recognised.

We verified the appropriateness of the consolidation adjustments in respect of accounting for these transactions.

We assessed the accounting for the acquisitions to verify that they were accounted for and, where appropriate, disclosed in the financial statements in accordance with IFRS as adopted by the European Union.

We performed full scope audit procedures over Luarmia S.L group of companies, Americare Group, Dr Sunny Healthcare Group and ProVita International Medical Center LLC which represented all of the significant complex transactions in the current year.

We also performed audit procedures on the purchase price allocation exercise in respect of these acquisitions which covered 100% of the goodwill and intangible assets recognised in respect of these transactions.

Based upon the procedures we have performed, we concur with the Group's final accounting for the acquisitions of Luarmia S.L group of companies and Americare Group, and the provisional accounting for the acquisitions of Dr Sunny Healthcare Group and ProVita International Medical Center as at 31 December 2015.

We have reviewed the business combinations disclosures in respect of the acquisitions which completed in 2015 and we believe that these are appropriate and in compliance with the requirements of IFRS 3 Business combinations.

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the health care industry

KAM	Health Care
Valuation of non-current assets	GENUS PLC
Employee benefits	ASTRAZENECA PLC
Impairment	GENUS PLC

### SIC CODE 87 Engineering

Out of the 350 constituents of the FTSE 350, 9 are active in the engineering industry. Our dataset contains information about 8 of these companies. The engineering industry is one of the smallest industries in the FTSE 350.

#### 1) Number and length of KAM

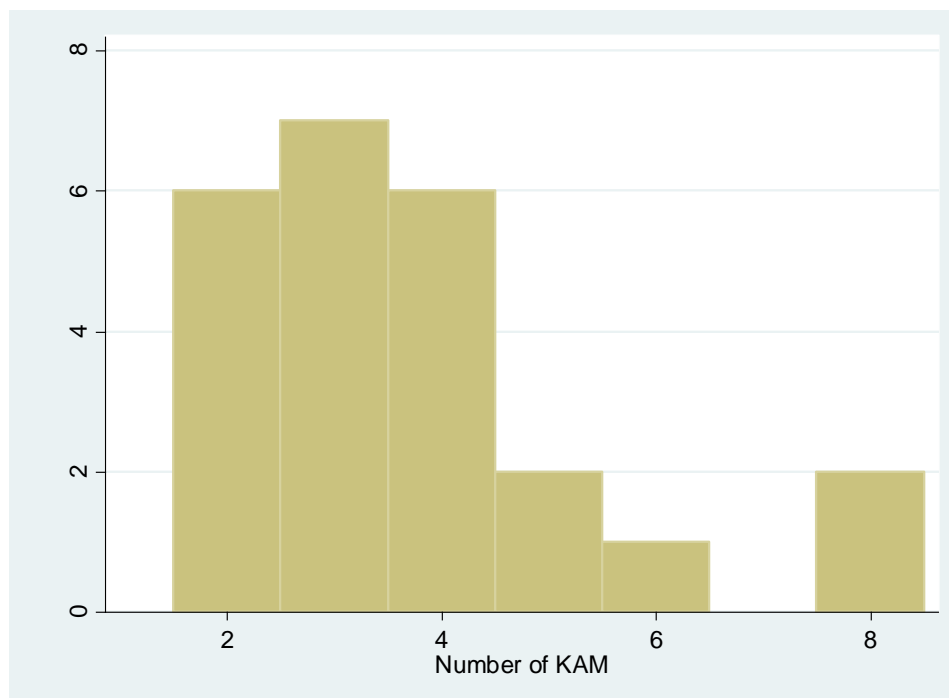
Table 1 gives an overview of the number of KAM included in the auditor's report. This table presents the following descriptive statistics: median, mean value, quantiles and the standard deviation of the number of KAMs.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Number of KAM first year	8	3.63	1.92	2	3	3	4	8
Number of KAM second year	8	4.13	1.96	2	3	4	5	8
Number of KAM third year	8	3.38	1.30	2	3	3	4	6
Number of KAM all years	24	2.71	1.71	2	3	3	4	8

**Table 1: The number of KAM in the engineering industry**

Looking at the total sample period of three years we observe that the median number of KAM equals 3. The median changes over time, where it increases from three to four in the second year, but decreases again to three in the third year. It should be noted that the variance is very high (1.71), indicating that the absolute number of KAMs significantly varies between the different companies. The high variance in the number of KAMs between companies can also be observed from comparing the minimum and the maximum value. While the KAM section of some firms is limited to discussing only 2 KAM, some firms receive up to 8 KAMs.

Figure 1 shows the distribution of the number of KAMs. When inspecting the histogram, we can see that the number of KAMs most often included in the report equals 3. It should be noted that the amount of reports with two, three or four KAMs is almost equal.



**Figure 1: Histogram of the number of KAM in the engineering industry over the three year period**

Table 2 presents the descriptive statistics for the length of the KAM section, i.e. the number of words written in the KAM section. This table is structured in a similar way as Table 1 and contains: the median, mean, the minimum, the maximum, the quantiles and the standard deviation of the length of the KAM section.

	Obs	Mean	Std. Dev.	Min	Q1	Q2	Q3	Max
Length first year	8	832	395.40	469	538	753	969	1672
Length second year	8	1232	590.48	483	783	1082	1730	2182
Length third year	8	1265	504.94	658	887	1205	1518	2245
Length all years	24	1110	521.16	469	696	969	1518	2245

**Table 2: Descriptive statistics of the length of the KAM section in the engineering industry**

Table 2 shows that the number of words of the KAM section equals on average 1110 (median value of 969 words) using the three years as the sample period. We also observe a relatively high variance between the minimum and the maximum value of the KAM length (between 469 words and 2245 words).

While the number of KAM stays constant over time, the length significantly increases over the three years. Table 2 shows that the average length of the KAM section significantly increases from the first to the second year and remains quite stable from the second to the third year. Given the number of KAM decreases (see Table 1), this illustrates that the average length of a KAM discussed in the engineering industry increases from 230 in the first year to an average of 375 words in the third year.

Comparing the minimum and the maximum values of KAM however seems to suggest that there exists a high variance in the length of the KAM section although this variance will also be influenced by the difference in the number of KAMs discussed (2 to 8, see Table 1).

## 2) Type and sequence of KAM

While we already know that a median company active in the engineering industry discloses 3 KAMs (i.e. 89 KAMS in total for the 24 firm year observations) with an average length of 1110 words, Table 3 provides information about the top 4 of the KAMs most often disclosed in the audit report.

It is clear that the KAM most often disclosed is goodwill (24.72%), followed by revenue recognition (20.22%), taxation and regulation (12.36%) and presentation and disclosure (8.90%). The category 'Other' includes KAM such as provisions, acquisitions, employee benefits,... A detailed overview of the different types of KAM can be found in Appendix 1.

Looking at changes over time, we observe that the relative importance of goodwill (from 20.70% to 29.63%), revenue recognition (from 20.70% to 22.22%), taxation and regulation (from 6.90% to 18.52%) and presentation and disclosure (from 3.45% to 14.81%) increases over time, while the occurrence of other KAMs decreases significantly (from 48.25% to 14.82%).

Linking the information about the type of KAM to the number of KAM (in Table 1), while the number of KAM remains constant, the content of the KAM discussion section changes over time with more emphasis on goodwill, revenue recognition, taxation and regulation and presentation and disclosure.

	KAM	First year	Second year	Third year	All years
Most disclosed	Goodwill	20.70%	24.24%	29.63%	24.72%
Second most disclosed	Revenue recognition	20.70%	18.18%	22.22%	20.22%
Third most disclosed	Taxation and regulation	6.90%	12.12%	18.52%	12.36%
Fourth most disclosed	Presentation and disclosure	3.45%	9.09%	14.81%	8.90%
Fifth most disclosed	Other	48.25%	36.37%	14.82%	33.80%

**Table 3: Type of KAM most often disclosed in the engineering industry**

As the sequence of the KAM (first, second, third, ...) can also provide information about the importance of the KAM, Table 4 discusses the sequence of the three most common KAMs in the industry.

KAM	First KAM	Second KAM	Third KAM	Fourth KAM	Fifth KAM	Sixth Kam	Seventh KAM	Eight KAM
Goodwill	13.64%	31.82%	36.36%	18.18%	0.00%	0.00%	0.00%	0.00%
Revenue recognition	88.89%	5.56%	5.56%	0.00%	0.00%	0.00%	0.00%	0.00%
Taxation and regulation	0.00%	36.36%	27.27%	9.09%	18.18%	9.09%	0.00%	0.00%
Presentation and disclosure	0.00%	12.50%	25.00%	25.00%	0.00%	0.00%	25.00%	12.50%
Other	16.67%	36.67%	13.33%	13.33%	10.00%	6.67%	0.00%	3.33%

**Table 4: Sequence of the five KAMs most often discussed in the engineering industry**

Although revenue recognition is not the most important KAM discussed in the KAM section (see Table 3), if mentioned it most often appears first in the KAM section. Similarly, although goodwill is most often discussed in the KAM section (see Table 3) it is most likely discussed as the second or third KAM.

### **Materiality**

Table 5 reports the descriptive statistics related to the materiality base used as well as the percentage of the materiality level used. From Table 5 it is clear that profit before tax is most often used to determine the materiality level (87.50%), only 12.5% uses revenue.

Looking at the materiality level used, Q1 shows that a materiality level of 5% or higher is most commonly used in the engineering with a maximum of 12%.

	Base	obs	Frequency of the base	Materiality level used (%)						
				Mean	Std. Dev.	Min.	Q1	Q2	Q3	Max.
1	Profit before tax	21	87.50	5.92	2.25	2	5	5.1	6.5	12
2	Revenue	3	12.50	1.53	0.60	0.9	0.9	1.6	2.1	2.1

**Table 5: The applied materiality level in the engineering industry**

### 3) Summary of the main findings in the engineering industry

In the engineering industry the median number of KAM mentioned is 3 with an average length of 300 words per KAM. The content of the KAM section changes with more emphasis on taxation and regulation, revenue recognition and impairment. Although revenue recognition is relatively less important, if mentioned, the KAM appears first in the KAM section. Finally, descriptive statistics show that profit before taxes is the materiality basis used and the average median percentage equals 5%.

From the comparison with the total sample, we observe that engineering is an industry with a number of KAM which is lower than the median number of KAMs mentioned in the total sample.

	Engineering	Total sample
Number of KAM (median)	3	4
Length per KAM	300	305
Most common type	1. Goodwill	1. Revenue recognition
	2. Revenue recognition (first)	2. Valuation of non-current assets
	3. Taxation & regulation	3. Taxation & regulation
	4. Presentation and disclosure	4. Goodwill
	5. Employee benefits	5. Provisions

**Table 6: Summary table of the main findings in the engineering industry**

## Appendix 1: Frequency table of the KAMs disclosed in the engineering industry

KAM	Frequency	Percentage
Goodwill	22	24.72
Revenue recognition	18	20.22
Taxation and regulation	11	12.36
Presentation and disclosure	8	8.99
Employee benefits	7	7.87
Acquisitions	5	5.62
Provisions	4	4.49
Internal controls	4	4.49
Valuation of current asstes	3	3.37
Valuation	2	2.25
Valuation of non-current assets	2	2.25
Other	2	2.25
Going concern	1	1.12
Total	89	100

**Table 7: Frequency table of the different types of KAM (three year period) in the engineering industry**

## Appendix 2: Example of the longest KAM in the engineering industry

Serco group plc (2015 – Revenue recognition, 628 words)

### **Revenue and profit recognition including onerous contract provisions**

Revenue and profit recognition on contracts requires significant management judgement in the assessment of current and future financial performance. Complex areas in determining the Group's right to recognise revenue and profit in the current period include:

- interpretation of contract terms and conditions, including the billing and cash flow arrangements
- consideration of onerous contract terms
- recognition and recoverability of pre contract costs
- assessment of stage of completion and forecast costs to complete

The Group is required to make an assessment of the stage of completion and costs to complete over periods that can extend up to 15 years into the future in order to estimate the onerous contract provisions. The prediction of future events contains inherent risk and a high degree of management judgement.

At 31 December 2014, the Group recognised provisions for a number of contracts that became onerous of £447.1m to cover the excess of unavoidable costs of meeting the obligations under the contracts over the economic benefits expected to be received over the remaining term of such contracts. Such provisions arose predominantly where contractual volume and / or price risk rest with the Group and forecast revenues are largely fixed.

During 2015, the Group has continued to assess both those contracts for which onerous contract provisions were made at 31 December 2014, and other contracts which may display similar characteristics and potential onerous outcomes. The total onerous contract provision at 31 December 2015 was £302.1m following utilisation of £116.8m, new provisions of £89.1m, release of £93.0m of provisions no longer required and net movement of £7.6m relating to foreign exchange, unwinding of discount, and reclassifications.

Refer to notes 2 and 3 for the Group's accounting policy and critical accounting judgements over revenue and profit recognition and refer to note 30 for detailed disclosures of onerous contract provisions recognised by the Group as at 31 December 2015.

### **How the scope of our audit responded to the risk**

- Where we have taken a controls approach, we tested the operating effectiveness of controls over the contract lifecycle including tendering controls and estimating, contract monitoring, billings and approvals, contract ledger reconciliations and contract forecasting.
- We have challenged the right to recognise revenue through review of contractual terms and assessed management's judgement regarding the appropriate timing of revenue recognition, including where a percentage of completion basis was applied. We obtained contract forecasts and compared the assumptions to contract terms and where relevant inspected correspondence with parties to the contract.
- We developed an expectation of revenue from contracts where the contracts stipulate fixed revenue on a regular basis or by using external volume data and applying the rates per unit as per the contract to test the revenue recognised by the Group.
- Where the revenue is not based on a fixed amount or fixed rates per unit, we have performed test of details by testing the underlying work order / change orders for the contracts and the actual expenses incurred to provide those services.



- We challenged management's judgements of specific contract forecasts and historic operational costs comparing contract forecasts to past performance versus contractual targets to assess whether contracts are deemed to be onerous and reviewed provisions for anticipated losses This has included a review and challenge of evidence produced by third party experts, where used by management in determining certain future contract costs and the models for these onerous contracts
- For contracts where onerous contract provisions have been recognised or released during the year, we have assessed whether the provisions or releases were a change of estimate arising from new circumstances in the year or whether they represented the correction of a prior period error
- We have verified capitalised contract costs to underlying documentation and assessed the accounting treatment adopted by management

**Appendix 3: Longest KAMs of the five most common KAMs in the engineering industry*****FIRST RANKED KAM IN THE ENGINEERING INDUSTRY: GOODWILL*****Impairment of goodwill £481.4m**

Refer to page 79 (Audit Committee Report), page 107 (accounting policy), and pages 107 to 110 (financial disclosures)

The risk — The Group has significant goodwill and other acquired intangible assets in a wide range of geographical locations, and during the year recognised a £577.3m impairment charge of which £481.4m related to the impairment of the goodwill held in respect of the Industry Services CGU, with the remainder being against other intangible assets and property, plant and equipment of that CGU following a decline in current and forecast performance in light of the continued deterioration of oil and gas prices. These assets are reviewed, either on a stand-alone basis or as part of a wider cash-generating unit (CGU), for impairment using a value in use calculation, based on forecast cash flows, growth rates and discount rates, all of which require a high level of judgement. The assessment of future cash flows for the Industry Services CGU is particularly dependent on the expectation of the timing of the recovery in the Oil & Gas sector as explained on page 32.

**Our response**

We challenged the key assumptions used in the value in use calculation for each CGU tested, such as earnings and cashflow forecasts, the terminal growth and discount rate assumptions comparing earnings forecasts with Board approved budgets, comparing the results of the discounted cash flows against the Group's market capitalisation to determine if there were any significant differences that required further examination, and applying sensitivities where assets had a higher risk of impairment. We used external data, where necessary, in assessing and corroborating the assumptions used in the impairment testing, the most significant being the assumption over future oil and gas prices and challenged the basis for the Group's forecasts. We also tested the mathematical accuracy of the impairment models and performed sensitivity analysis to test the completeness and amount of the impairment charge recognised in the year. We used our own Corporate Finance specialists to assist us in assessing the discount rates and terminal growth rates applied to the forecast cash flows and compared the earnings forecasts to external market data such as analyst reports.

We also assessed the adequacy of the Group's disclosures in respect of asset carrying values and impairment testing in note 9.

*SECOND MOST RANKED KAM IN THE ENGINEERING INDUSTRY: REVENUE RECOGNITION***Revenue and profit recognition including onerous contract provisions**

Revenue and profit recognition on contracts requires significant management judgement in the assessment of current and future financial performance. Complex areas in determining the Group's right to recognise revenue and profit in the current period include:

- interpretation of contract terms and conditions, including the billing and cash flow arrangements
- consideration of onerous contract terms
- recognition and recoverability of pre contract costs
- assessment of stage of completion and forecast costs to complete

The Group is required to make an assessment of the stage of completion and costs to complete over periods that can extend up to 15 years into the future in order to estimate the onerous contract provisions. The prediction of future events contains inherent risk and a high degree of management judgement.

At 31 December 2014, the Group recognised provisions for a number of contracts that became onerous of £4471m to cover the excess of unavoidable costs of meeting the obligations under the contracts over the economic benefits expected to be received over the remaining term of such contracts. Such provisions arose predominantly where contractual volume and / or price risk rest with the Group and forecast revenues are largely fixed.

During 2015, the Group has continued to assess both those contracts for which onerous contract provisions were made at 31 December 2014, and other contracts which may display similar characteristics and potential onerous outcomes. The total onerous contract provision at 31 December 2015 was £302.1m following utilisation of £116.8m, new provisions of £891m, release of £93m of provisions no longer required and net movement of £7.6m relating to foreign exchange, unwinding of discount, and reclassifications.

Refer to notes 2 and 3 for the Group's accounting policy and critical accounting judgements over revenue and profit recognition and refer to note 30 for detailed disclosures of onerous contract provisions recognised by the Group as at 31 December 2015.

**The key procedures we have performed are**

- Where we have taken a controls approach, we tested the operating effectiveness of controls over the contract lifecycle including tendering controls and estimating, contract monitoring, billings and approvals, contract ledger reconciliations and contract forecasting
- We have challenged the right to recognise revenue through review of contractual terms and assessed management's judgement regarding the appropriate timing of revenue recognition, including where a percentage of completion basis was applied We obtained contract forecasts and compared the assumptions to contract terms and where relevant inspected correspondence with parties to the contract
- We developed an expectation of revenue from contracts where the contracts stipulate fixed revenue on a regular basis or by using external volume data and applying the rates per unit as per the contract to test the revenue recognised by the Group
- Where the revenue is not based on a fixed amount or fixed rates per unit, we have performed test of details by testing the underlying work order / change orders for the contracts and the actual expenses incurred to provide those services
- We challenged management's judgements of specific contract forecasts and historic operational costs comparing contract forecasts to past performance versus contractual targets to assess whether contracts are deemed to be onerous and reviewed provisions for anticipated losses This has included a review and challenge of evidence produced by third party experts, where used by management in determining certain future contract costs and the models for these onerous contracts

- For contracts where onerous contract provisions have been recognised or released during the year, we have assessed whether the provisions or releases were a change of estimate arising from new circumstances in the year or whether they represented the correction of a prior period error
- We have verified capitalised contract costs to underlying documentation and assessed the accounting treatment adopted by management

*THIRD MOST OFTEN RANKED KAM IN THE ENGINEERING INDUSTRY: TAXATION AND REGULATION***Impact of tax planning, recognition of deferred tax assets and research and development tax credits**

Refer to the Audit Committee Report (page 60) and Notes 8 and 15 of the Group financial statements.

We focused on the risk arising from tax planning given the significant judgements involved in assessing uncertain tax positions including those relating to the financing structures the Group has in place in Canada and the United States.

We focus on the recognition of certain deferred tax assets and assets relating to research and development credits as both these areas involve judgement in the assessment of the recoverability of the associated tax asset. This includes assessment of the period over which taxable profits will be available to utilise the assets against.

The magnitude of the risk (the likelihood of occurrence and the size of an error should it occur) is consistent with the prior year.

**How our audit addressed the area of focus**

We tested internal financial controls over the determination of tax risk provisions. We also tested internal financial controls over the recognition of deferred tax and research and development assets.

We challenged tax exposures estimated by management. Using our tax experts we evaluated the risk analysis associated with these exposures along with claims or assessments made by tax authorities to date. We have also reviewed documentation in relation to tax audits to ensure that any exposures the tax authorities are raising have been considered and provided for where necessary.

We have challenged the profit forecasts used by management in determining the period over which deferred tax assets and assets held in respect of research and development tax credits will be recovered. We have also assessed if management's rationale over the length of time such assets will be recovered, is reasonable.

We have evaluated the historical accuracy of forecasting taxable profits and the integrity of the models used.

**What we concluded to the audit committee**

We are satisfied that the provisions recorded in respect of tax risks are within an acceptable range.

The carrying value of assets relating to deferred tax and research and development tax credits are within an acceptable range at the year end.

*FOURTH MOST OFTEN RANKED KAM IN THE ENGINEERING INDUSTRY: EMPLOYEE BENEFITS***Pension commitments**

The Group has a net pension related asset of £115 bn as at 31 December 2015, comprising £1,308.9m assets and £1,196.4m liabilities adjusted by £1.9m for franchise arrangements and £1.2m for the members' share of scheme deficits. The net asset value is based on actuarial assumptions used in the measurement of the Group's pension commitments which involves judgements in relation to mortality, price inflation, discount rates, and rate of pension and salary increases, around which there are inherent uncertainties. Judgement is also exercised in determining whether a pension surplus should be recognised as an asset, and the extent of the Group's pension liability in respect of franchise and other contractual agreements.

Please refer to note 34 which details the valuation of the pension assets and the actuarial assumptions used in measuring the Group's pension commitments. The Group's accounting policy and critical judgement disclosures in relation to recognition of pension assets and liabilities are set out in note 2 and 3.

**The key procedures we performed are**

- We evaluated the appropriateness of the principal actuarial assumptions used in the calculation of the Group's pension commitments, using our own actuarial experts, and by benchmarking certain assumptions to independent data.
- As part of our work we reviewed advice received by the Group from its external actuaries and used our actuaries to challenge the advice in relation to the Group's unconditional right of refund and the recoverability of pension surplus amounts
- We challenged contract specific pension commitments recorded including those arising from franchise arrangements
- We performed substantive audit procedures on the data provided by management to their actuaries, to determine whether it is accurate and complete
- We have substantively tested pension contributions to and from the pension scheme to determine whether they reflect payroll deductions and pension payments

*FIFTH MOST OFTEN RANKED KAM IN THE ENGINEERING INDUSTRY: PRESENTATION AND DISCLOSURE***Assessment of whether losses incurred in 2015 should have been recognised in prior periods**

(Note 2 26a)

Given the £195 million of losses incurred in UK Construction Services in 2015 (including the £8 million disclosed as non-underlying), management have undertaken an assessment to determine whether any of the losses should have been recognised in prior periods.

This exercise was inherently judgemental as it required the reassessment of contract positions as at the prior period balance sheet date using information which was available or should reasonably have been available at that point in time without using the benefit of hindsight and in accordance with the requirements of IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors.

Management concluded from this exercise that the impact of any errors relating to prior periods was not material in the context of the Group accounts and accordingly the 2014 financial statements have not been restated.

**How the scope of our audit responded to the risk**

Management performed an exercise looking at material contract write-downs. We reviewed this analysis and challenged the conclusions reached. In addition to reviewing management's own analysis, we also considered the following sources of information as part of our audit:

- historical UK Construction Services and Group contract and commercial issues papers,
- findings included in contract specific internal audit reports,
- observations and findings from site visits performed and other discussions held with management during 2015,
- subsequent events reviews performed at each balance sheet date, and
- prior period audit working papers

Appendix 4: For the non-top 5 KAMs the name of the firm with the longest KAM in the engineering industry

KAM	Engineering
Provisions	INTERTEK GROUP PLC
Internal controls	AMEC FOSTER WHEELER PLC
Valuation	AMEC FOSTER WHEELER PLC
Valuation of non-current assets	INTERTEK GROUP PLC
Other	BALFOUR BEATTY PLC



## **Conclusion**

This study was done to address the question whether extended audit reports have the potential to be informative. Based on our descriptive analyses we posit that the answer to this question is affirmative. Note that our descriptive analyses provide an extensive overview of the KAM and materiality disclosures made. We systematically analyzed the extended audit reports of 263 firms belonging to the FTSE 350 index in the UK over the first three years of implementation.

For the median firm in the sample we find the following results:

- The number of words in the KAM section equals 1011 words. The number of words increased over the period by 529 words. 49% of the words relate to the description of the risk, 51% to the reply of the auditor;
- The number of KAMs discussed is 4 and remains 4 over the total period studied.
- The top 5 of the KAMs discussed is: revenue recognition, valuation of non-current assets, taxation and regulation, goodwill and provisions. KAMs such as presentation and disclosure and financial instruments are more often mentioned over time while internal control and valuation of non-current assets less likely occurs in later years
- The materiality used is 'profit before tax' and for the median firm in the sample the level is 4.9%, which drops to 4.48%. Significant differences in the way extended audit reporting is done exist between industries, firms within an industry and within firms over time. We observe a high variance between industries but also between firms in a particular industry. The average amount of KAMs and the type of KAMs commonly included in the report differ greatly from industry to industry and from firm to firm.

When looking at the average length of the KAM section, we see a big increase from the first to the second year, indicating that the auditor has learned from prior experience to deliver a more elaborate and informative report. Based on this observation it is likely that this will continue to increase in the next years.

By increasing outsiders' understanding of the audit process and highlighting the biggest risks present in the firm and the way the auditor dealt with those risks, the extended audit report has the potential to reduce the information asymmetry between firms and their stakeholders. Finally, note that the disclosure of the materiality level could also further decrease the asymmetry in information in information. The descriptive statistics also show that the materiality level decreases over time.